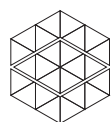


# SHAVER DRILL BITS

Drill bits for the flapless technique on **soft and hard tissue**.



BIOTECH DENTAL

# FLAPLESS TECHNIQUE

Flapless implant surgery consists of creating surgical bone access allowing the use of drills and implant placement without flap detachment or stitching.

This technique has several advantages for the patient:

- › Non-traumatic
- › Extremely contained bleeding
- › Shorter surgical procedure
- › Less painful post-operative effects
- › Reduced healing time

# CLASSIC VS SHAVER DRILL BITS

## Classic Drill Bits

Performs circular incision of the mucous membrane without removing it and without affecting the periosteum and bone. A lancet, a curette and curved forceps are required to complete the surgical procedure.

## Shaver Drill Bits

These drill bits are moving forward the concept of flapless surgery. **They allow for the preparation of the mucous membrane, periosteum and targeting before drilling for the placement of Kontakt™ implants with one cortical bone operation.** The surgical site can be prepared without a lancet, curette or pointing drill.

## BENEFITS

- ✓ Simplified technical equipment
- ✓ Shorter surgical procedure
- ✓ Accurate and repeatable results
- ✓ For the first time, **there is a drill bit for every diameter of implant for optimal precision.**
- ✓ **Less painful post-operative effects and no swelling.**

# PREREQUISITES FOR DRILL BIT USAGE

- › Keratinised gingiva at least equal to or above 4 mm
- › Sufficiently wide crestal bone

# TECHNICAL FEATURES

The drill bits are made up of **two parts**:

## 1 Tissue Punch



A circular crown that makes an incision in the mucous membrane. Inner receptacle.

The depth of mucous removed can be seen from the laser markings on the punch.

## 2 Trepines



The shaver's 5 sharpened blades make an incision in the mucous membrane as well as retract and remove it in one operation on the periosteum and cortical bone. The pointed trocar is located in their centre.

**Trocar:** it goes over the shaver which in turn goes beyond the circular crown. It perforates the cortical bone at the centre of the drill bit. The internal design of the drill bit removes and lifts the lanced mucous.

**Flat spots:** can be found on the sides to make assembly/disassembly of the drill bits easier after each surgery.

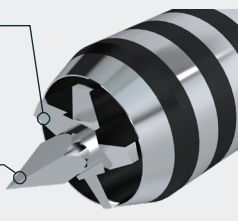
# FEATURES OF THE TREPHINE BLADES AND THE TROCAR TIP

**1**

The trephine blades slice the gum to the diameter of the implant.

5 blades go 0.5 mm beyond the punch

The tip centres the perforation



**2**

The trocar tip perforates the cortical bone centrally for the pilot drill to go through.



## FLAPLESS DRILL BIT RANGE

### 1 DIAMETER OF DRILL BIT FOR EVERY DIAMETER OF IMPLANT

(Kontakt™, Kontakt™ N, Kontakt™ S, Kontakt™ S+ implants)

Flapless drill bits are available in **5 different diameters:**

1 diameter for every diameter of implant for perfect circular incision of the mucous membrane for every diameter of Kontakt™ implants.

	Ø 3.0 mm	Ø 3.6 mm	Ø 4.2 mm	Ø 4.8 mm	Ø 5.4 mm
Ø Trephines in mm	3.2	3.8	4.4	5	5.6
Ø Punches in mm	4.4	5	5.6	6.2	6.8

## CONTENTS OF THE PURE FLAPLESS KIT

References	Quantities	Descriptions
KTFLAP30	1	Flapless Drill Bit for Ø 3.0 mm implant
KTFLAP36	1	Flapless Drill Bit for Ø 3.6 mm implant
KTFLAP42	1	Flapless Drill Bit for Ø 4.2 mm implant
KTFLAP48	1	Flapless Drill Bit for Ø 4.8 mm implant
KTFLAP54	1	Flapless Drill Bit for Ø 5.4 mm implant



# ROTATION SPEEDS

**For a thin mucous membrane**  
(lower than or equal to 2 mm):

**Rotation of 1,600 turns / min  
for 16 to 22 seconds**

1 to 2 irrigation power

**For a thick mucous membrane**  
(over 2 mm):

**Rotation of 2,000 turns / min for  
20 to 25 seconds**

High irrigation (never more than 50%). Do not hesitate to remove the drill bit in order for the irrigation to cool down the blades before completing the process.

**For extremely thick mucous membrane**  
(over 4 mm):

**Rotation of 2,000 turns / min for 30 to  
35 seconds**

High irrigation (never more than 50%). Do not hesitate to remove the drill bit in order for the irrigation to cool down the blades before completing the process.

## CORRESPONDENCE TABLE

### KONTACT™ S+ IMPLANTS / FLAPLESS DRILL BITS

For the placement of a **Kontakt™**, **Kontakt™ N** and **Kontakt™ S** implant, use the flapless drill bit with the corresponding diameter to the implant you are going to place.

For implants from the **Kontakt™ S+** range, refer to the correspondence table opposite:

Kontakt S+ implants	KTFLAP
<b>K4008-36S</b>	KTFLAP42
<b>K4010-36S</b>	KTFLAP42
<b>K4012-36S</b>	KTFLAP42
<b>K4508-42S</b>	KTFLAP48
<b>K4510-42S</b>	KTFLAP48
<b>K4512-42S</b>	KTFLAP48
<b>K5008-42S</b>	KTFLAP54
<b>K5010-42S</b>	KTFLAP54
<b>K5012-42S</b>	KTFLAP54
<b>K5508-42S</b>	KTFLAP54
<b>K5510-42S</b>	KTFLAP54
<b>K5512-42S</b>	KTFLAP54

## EXPERT ADVICE



### Cortical bone operation

In order to level it, the length of the process and pressure applied on the drill may need to be increased. Be sure to irrigate thoroughly.

### Several processes in the same session

To maintain optimal efficiency, the trephines must be dismantled and cleaned in order to empty the receptacle before each use of the drill. It is recommended to have several sets of drill bits in case of multiple implant placement of the same diameter.