Sonic tips | **SFD7/SFM7**

4 arguments in favour of Komet tips:

❶ optimised diamond coating (60 µm instead of 40 µm) to facilitate shaping and finishing

❷ the shape is adapted to modern ceramic inlays (instead of the previously used ceramin inserts) and guarantees plane lateral surfaces and rounded transitions

❸ more axial depth to improve the shaping of the buccal and lingual surfaces of the interproximal box as well as the floor of the box

❹ the tip is available in 2 sizes to suit molars and premolars

for the preparation of interproximal cavities.

In close cooperation with Dr. M. Oliver Ahlers, Hamburg, Komet® has developed sonic tips for the preparation of interproximal cavities. The new sonic tips are designed for the final shaping of cavities and for smoothing the interproximal cavity margins. The diamond coated working parts of the 4 new sonic tips are bisected lengthwise (mesial and distal), which makes them ideally suited for work on molars and premolars. To prevent damage to the adjacent tooth, the tips are only coated on one side.

The popularity of ceramic restoration is constantly on the increase. In order to create durable all-ceramic restorations of outstanding quality, certain rules have to be observed during the preparation of the recipient area prior to ceramic restorations. The shaping of the interproximal zone is particularly challenging. A slightly diverging, box-shaped preparation should be aspired, with right angles at the restoration margin. It is therefore essential not to prepare acute angles and to avoid irregular margins and instable enamel structures.

This is where the new sonic tips made by Komet come in. These tips were developed in line with the preparation guidelines for ceramic restorations, with a view to facilitating the shaping of the interproximal boxes. Thanks to their rounded angles in the transition area between the axial and the shoulder region, these sonic tips are capable of preparing the cavities to a perfectly chamfered shape, thus creating ideal conditions for taking a precise impression of the preparation, with either conventional impression material or by means of advanced radiographic techniques.
The new sonic tips are therefore ideal for both conventional and CAD/CAM restorations. What's more, they create perfect conditions for the subsequent work in the dental laboratory. The clear and concise shape of the preparation greatly facilitates the construction of precise restorations.

Clinical sequence:

1. The basic preparation is carried out according to the established method with rotary diamond instruments (for example with the Expert Set 4562 for ceramic inlays and partial crowns).

2. Prepare an interproximal box with a tapered instrument. The interproximal enamel wall remains intact for the time being.

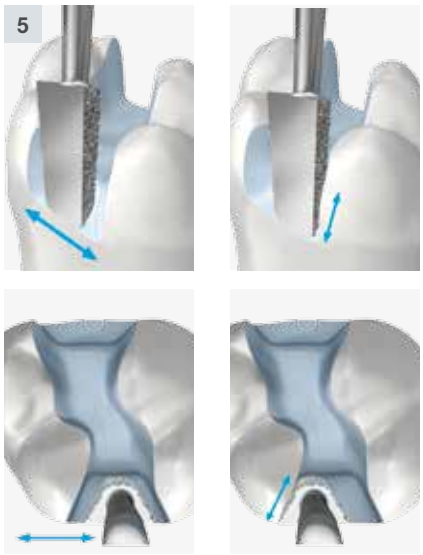
3. A manual or flame-shaped rotary instrument is used to remove the enamel lamella. The adjacent tooth can be protected with a steel matrix.

4. Preparation after the removal of the enamel lamella. Residual enamel – as shown on fig. 4 – is frequently left behind at the cavity margin which can lead to fracture and an imprecise marginal seal.

5. The interproximal cavity margin is shaped and smoothed performing vestibular/oral movements.

The sonic tip is guided along the cavity margin in mesio/distal direction in order to remove any instable enamel structures.

6. Finished, perfectly smooth preparation.



Recommendations for use:

1. Start sonic tip with plenty of water spray prior to applying the tip to the tooth.

2. Work with low contact pressure (approx. 1.5 N). Excessive contact pressure will dampen the oscillations of the sonic tip, thus reducing its effectiveness.

3. Recommended power levels in the SF1LM:
Power level 1: Finishing
Power level 2: -
Power level 3: Shaping

The tips can also be used in the following hand pieces:

- in the SONICflex® hand piece made
- by KaVo (Series 2000N/L/X/LX or
- series 2003N/L/X/LX)
- in the scalers made by the co. W&H (Series Synea® ZA-55/L/LM/M or series Alegra® ST ZE-55RM/BC)
- im SIROAIR L of the co. Sirona

Indication:

Final shaping of interproximal cavities and smoothing of interproximal cavity margins in molars and premolars. The following restorations can be used subsequently:

- Direct fillings made of tooth-coloured composites
- Inlays/partial crowns made of pressed ceramics or CAD/CAM milled ceramics

Advantages:

- Rounded shapes for the preparation prior to receiving ceramic inlays and composite fillings.
- 2 different sizes for work on small and large lateral defects.
- The optimum interproximal cavity angle prevents unsupported enamel prisms and creates restoration margins that can be clearly read and scanned.
- The tips are only coated on one side to prevent damage to the adjacent tooth.

Handy hint:
Designed for the gentle and precise positioning of the restoration, the CEM tip SF12 ideally complements these sonic tips.

SF12 and holder SF1981

For premolars:

SFM7.000.1 - mesial

SFD7.000.1 - distal

For molars:

SFM7.000.2 - mesial

SFD7.000.2 - distal

Accessories:

SF1978
Rinse adaptor for sonic tips

(To be reprocessed in a Miele cleaner/ disinfector)

9981 Kupplung
4 hole Lux coupling

SF1LM
Komet sonic hand-piece with MULTIflex® connection. Supplied with a tip changer SF1975.

MULTIflex® is a registered trademark of the company KaVo Dental GmbH, Biberach, Germany

9952
Sterilisation container

SF1975
Tip changer with torque

Recommendation for the basic preparation prior to inserting ceramic inlays and partial crowns: Expert Set 4562

1. Round off the transitions between the floor and the walls of the cavity as well as all angles within the cavity.

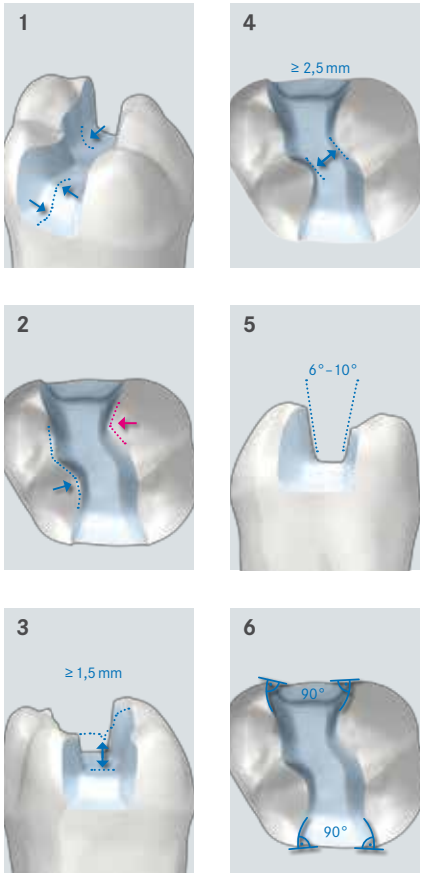
2. Check the contour of the preparation from occlusal to exclude any sharp edges. The inlays are ground from the outside to exactly match the shape of the cavity. The bur used to grind the inlay is unable to recreate such sharp edges, which would lead to undesirable gaps between the inlay and the cavity wall.

3. When creating the fissure, make sure that a minimum occlusal depth of 1.5 mm is observed even underneath the fissure. You can deepen the cavity floor with a round bur.

4. To avoid fracture of the inlay, make sure that a width of at least 2,5 mm is observed even at its thinnest point (isthmus).

5. Work in diverging manner rather than in a parallel manner. The recommended opening angle of the cavity walls is 6° – 10°. The adhesive fixation eliminates the need for any other type of retention.

6. The surface angle at the transition between the cavity and the surface of the tooth should be approx. 90°, to give the ceramic and the dental substance increased stability. Protect the neighbouring tooth with a steel matrix. Give the proximal edges a slightly concave shape by means of a flame-shaped instrument which should always be used on the sides of the box, never on its floor. Oscillating instruments are equally suitable for shaping the walls of the box.



Developed in close cooperation with the experts:
PD Dr. Ahlers, OA Dr. Blunck, Prof. Dr. Frankenberger, Dr. Hajtó, Dr. Mörig, Prof. Dr. Pröbster

Set 4562
In a plastic instrument tray

Set 4562ST
In a bur block suitable

Content of Set 4562/4562ST

● **6847KRD**.314.016

● **8847KR**.314.016


959KRD.314.018


● **8959KR**.314.018


845KRD.314.025


● **8845KR**.314.025

● **8862**.314.012

● **8862**.314.016


801.314.023


● **8379**.314.023

Further information on our website:

Video “Reprocessing rules for ceramic inlays and partial crowns”

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