

US patent 6, 241, 522

Interproximal enamel reduction | OS Discs

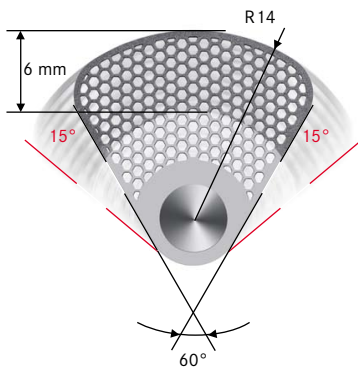
Oscillating segment disc for interproximal enamel reduction (IPR)

Interproximal enamel reduction (also called “Stripping” or IPR) is an application in orthodontic surgery with different indications, e.g. for correcting a disproportion of tooth sizes in the lower and the upper jaw, for the elimination of crowding and for increasing the durability of orthodontic treatment results by adapting the proximal contact areas, especially in case of lower anteriors.

With the support and professional advice of Prof. Dr. Jost-Brinkmann of the Berlin Charité Dental Hospital, Komet has now developed a reliable solution for safe and efficient oscillating stripping. The new oscillating 60° segment disc is convincing due to its size: with a radius of just 1.4 cm and a pivoting angle of 30° it is perfect for use in the most narrow areas without the need for a disc-guard.

Problems that arise with hand instruments (diamond strips), like too little space for grinding movements or jamming, are only partly solved with rotary diamond discs. Although stripping is facilitated considerably by using rotary discs, there are still disadvantages like the risk of damaging soft tissue and an obstructed vision when using a disc-guard.

Compared to rotary discs with full radius and diameters of up to 2.2 cm, which must be used with a disc-guard, the segment disc offers the best features for stripping in hard-to-reach areas. Thanks to optimal vision and excellent grinding efficiency, the OS disc with its patented design is an innovative instrument leading to absolutely convincing results.



Scientific advice:
Prof. Dr. Paul-G. Jost-Brinkmann

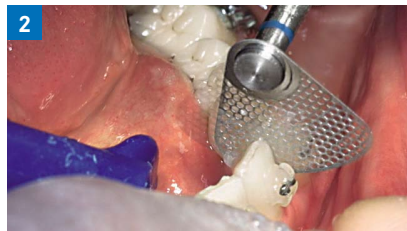
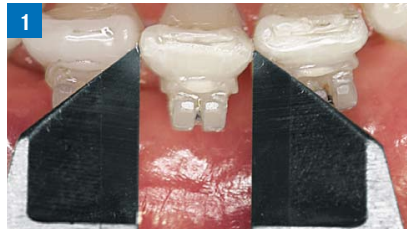
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Application

1. In order to minimize the risk of removing excessive enamel substance, the tooth width should be measured with a sliding calliper prior to use and also during the enamel reduction. Alternatively, a thickness gauge can be used to measure the thickness of the removed enamel.

2. - 3. According to the amount of enamel to be reduced, the corresponding type of segment disc is chosen. The disc is moved in occlusal to cervical direction. The teeth to be treated should be aligned in a straight line. Starting with a medium grain disc, it should be considered that further reduction is carried out during the subsequent finishing procedure (see fig. 3).

4. Result after polishing and fluoridation.



- The segment disc is to be used in the oscillating Komet contra-angle OS30.
- When using the full capacity of the micromotor (40,000 rpm), an effective performance of 5,000 oscillations/min. is reached.
- It is also possible to use the instruments in an air motor: In this case, at maximum capacity of the motor (20,000 rpm), an effective performance of 2,500 oscillations/min. can be reached.
- The disc has to be inserted from occlusal and guided down through the contact point in a slow but continuous movement.
- Apply sufficient spray coolant.
- We recommend using the Komet composite polishing discs (Kit 4564) for subsequent interproximal enamel polishing.

Single sided discs:

- **OS1MV.000.140**
Thickness: 0,20 mm, coated at the front
- **OS1MH.000.140**
Thickness: 0,20 mm, coated at the back
- **OS1FV.000.140**
Thickness: 0,13 mm, coated at the front
- **OS1FH.000.140**
Thickness: 0,13 mm, coated at the back
- **OS15FV.000.140**
Thickness: 0,15 mm, coated at the front
- **OS15FH.000.140**
Thickness: 0,15 mm, coated at the back
- **OS20FV.000.140**
Thickness: 0,20 mm, coated at the front
- **OS20FH.000.140**
Thickness: 0,20 mm, coated at the back

Double sided discs:

- **OS25M.000.140**
Thickness: 0,25 mm
- **OS1M.000.140**
Thickness: 0,30 mm
- **OS35M.000.140**
Thickness: 0,35 mm
- **OS2M.000.140**
Thickness: 0,45 mm
- **OS1F.000.140**
Thickness: 0,15 mm
- **OS20F.000.140**
Thickness: 0,20 mm
- **OS2F.000.140**
Thickness: 0,30 mm



OS30
Oscillating contra-angle

Tip:

We recommend the new IPR Kit 4594 with selected segment discs.



IPR Kit 4594
developed in cooperation with Dr. Drechsler, Germany