

Interproximal enamel reduction | OS Discs



Oscillating segment disc for interproximal enamel reduction.

Interproximal enamel reduction (also called "Stripping" or IPR) is an application in orthodontic surgery that is used for a range of 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.

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 discguard.

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 size of this new oscillating 60° segment disc is ideal for this application: 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.

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 unique design is an innovative instrument leading to absolutely convincing results."

Scientific advice:

Prof. Dr. Paul-G. Jost-Brinkmann

Address for correspondence:

Charité – Universitätsmedizin Berlin
Zentrum für Zahn-, Mund- und Kieferheilkunde
Abt. für Kieferorthopädie und Orthodontie
Augustenburger Platz 1 · 13353 Berlin

Application:

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

2. – 3. The corresponding type of segment disc is chosen according to the amount of enamel to be removed. The disc is moved in occlusal to cervical direction. The teeth to be treated should be aligned and in straight position. Start with a medium grain disc, bearing in mind that more substance will be removed during the subsequent finishing stage (see fig. 3).

4. Result after polishing and fluoridation.



Recommendation for use:

- 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, an effective performance of 2,500 oscillations/min. can be reached.
- The disc has to be inserted from occlusal or vestibular and guided down through the contact point in a slow but continuous movement.
- Apply sufficient spray coolant.
- We recommend using the Komet ASP-Kit 4598 for subsequent interproximal enamel polishing.

Tip:

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



IPR-Kit 4594A

developed in cooperation with Dr. Drechsler

Single sided discs:

- **OS18MV.000.110**
Thickness: 0,18 mm, coated at the front
- **OS18MVE.000.140**
Thickness: 0,18 mm, center without diamond coating, diamond coated on the front side
- **OS18MH.000.110**
Thickness: 0,18 mm, coated at the back
- **OS18MHE.000.140**
Thickness: 0,18 mm, center without diamond coating, diamond coated on the front side
- **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