



# Crown cutters

## H35L/H4MC<sup>®</sup>L/4ZR/4ZRS

Clean, precise, fast.

Komet's<sup>®</sup> line of highly efficient cutters includes a team of four instruments that are specially developed to cut through any crown quickly and easily. The H35L crown cutter features a special blade geometry that permits cutting through non-precious metal and gold with minimal effort. Its slim neck simplifies work along the entire length of the instrument's working portion.

The H4MC<sup>®</sup>L, for metal and ceramics, is ideal for cutting PFM and hard-metal crowns. This ingenious instrument cuts through ceramic veneering and the underlying metal structure without requiring instrument changes.

The 4ZR, for really tough jobs, meets the challenges of cutting through all-ceramic crowns, especially those made of extremely hard ceramic materials such as zirconium dioxide.

The newest addition to the team is the 4ZRS Jackie<sup>™</sup> crown cutter, which addresses the challenge of removing adhesive-bonded, all-ceramic crowns. Optimized for use on zirconia and other high-strength ceramic materials, the Jackie<sup>™</sup> crown remover (4ZRS.FG.016) is uniquely engineered to slit crowns and bridges to simplify final fracture and removal with a hand instrument. With a length of 4 mm and a tapered working end, the cutter is ideally suited for creating lingual, occlusal, and buccal separating joints, which are essential when working to remove adhesively bonded restorations.

### Advantages of the crown-cutter quartet:

- Tip transversing blade on tungsten carbide burs to facilitate penetration of the crown material
- Time savings
- Reduced heat generation thanks to effective chip spaces
- Outstanding durability



**Indications:**

**All-ceramic crowns**

1a. For cutting adhesive bonded, all-ceramic crowns, we recommend Jackie™ (4ZRS).

1b. Particularly in the case of adhesively bonded all-ceramic restorations, the separation joint should also encompass the incisal edge or the axial wall, respectively the occlusal surface in the lateral tooth area.

1c. To remove the restoration, it has to be widened until it fractures. This can be performed with a lever or a Planert crown widening pliers (Aesculap USA).

To grind down residual fragments, we recommend our 4ZR.FG.012/014.

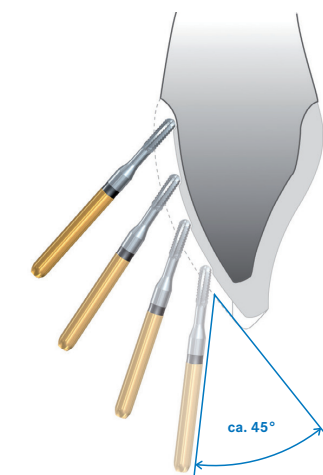
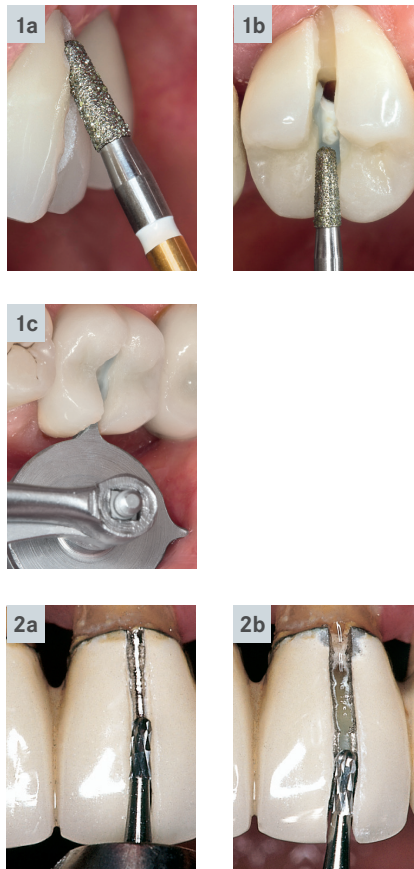
**PFM crowns**

2a. Use the Komet® tungsten-carbide crown cutter H4MC®L.FG.012 to cut the ceramic veneering. Apply the cutter to the crown in intervals to cut only a small area each time.

2b. Cut the underlying metal structure with the same instrument.

**Crowns made of non-precious metals or gold**

- To cut crowns made of non-precious metals or gold, the H35L offers outstanding efficiency thanks to its optimized blade geometry.
- The Komet® H35L crown cutter offers an exceptionally long service life and features a slim neck to facilitate work along the entire length of the instrument's working portion.



**Recommendations for use:**

- Optimal speed:  $\varnothing_{opt.}$  160,000 rpm in the micromotor.
- When cutting materials that tend to “jump” (e.g., certain non-precious alloys), use the instruments in the turbine and apply a low contact pressure.
- To take full advantage of the instrument's working portion during the cutting procedures, apply the instrument at an angle of approximately 45° to the crown.
- Always apply sufficient coolant (at least 50 ml/min.).
- Do not exceed a maximum contact pressure of 2N.

