



# ZrO<sub>2</sub> | ZR-Diamonds™



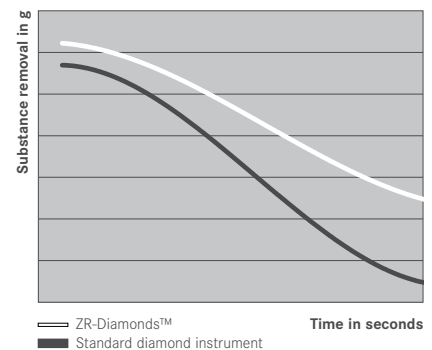
## Specialized instruments for all-ceramic restorations.

Offering a combination of strength, durability, and outstanding esthetics, all-ceramics are a popular restorative choice for today's dentists who aim to provide healthy, attractive smiles to patients seeking cosmetically pleasing options for their restorative care. All-ceramics are, however, exceptionally difficult to manage and cut with conventional diamond instruments.

ZR-Diamonds™ were developed to meet these challenges, and they have been the premier choice for working with modern high-strength ceramics since their introduction into the dental marketplace. Unmatched in versatility and performance, ZR-Diamonds™ address these real, everyday challenges by providing superior results quickly and with minimal effort. Offered in a range of shapes and sizes, ZR-Diamonds™ provide an effective, efficient, and easy-to-use option for adjusting high-strength ceramic restorations.

### Advantages:

- Permanently bonded, high-quality diamond particles
- Densely packed diamond layer
- Outstanding durability & extended service life
- Optimal material-reduction capacity
- Extensive range of shapes and sizes to meet all needs



Substance removal in relation to time

### Application:

- Coarse grit  
Ideal for gross contouring
- Medium grit  
Minimally abrasive, especially suited for smaller adjustments
- Fine grit  
For creating optimal smooth surfaces

**Application:**

1. Slight adaptation of the ZrO<sub>2</sub> crown with the ZR862.FG.016.

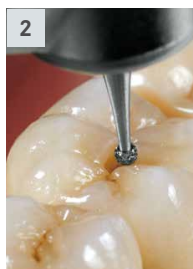
2. Quick trepanation with the round special abrasive ZR6801.FG.010/014/023.

3a. For cutting adhesive bonded, all-ceramic crowns, we recommend Jackie™ (4ZRS). This instrument has to be applied at an angle of 45° to the crown.

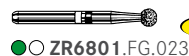
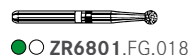
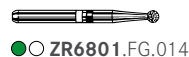
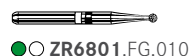
3b. Particularly in the case of adhesively bonded all-ceramic restorations, the separation joint should also encompass the incisal edge or the axial wall, respectively the occlusal surface in the lateral tooth area.

3c. 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).

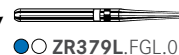
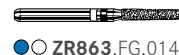
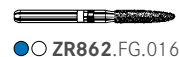
To grind down residual fragments, we recommend our 4ZR.FG.012/014.



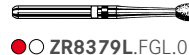
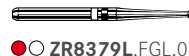
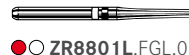
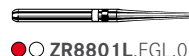
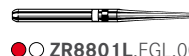
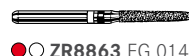
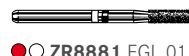
**Coarse Grit**



**Medium Grit**



**Fine Grit**



**ZrO<sub>2</sub> and lithium disilicate crown remover**



**Recommendations for use:**

- Optimal speed: 160,000 rpm
- Use the instruments in the red contra-angle, as the higher torque is advantageous for efficient work on ZrO<sub>2</sub> (compared to the torque of the conventional turbine).
- Use maximum spray coolant, especially during the trepanation procedure (min. 50 ml/min.).
- Apply low contact pressure (<2N).

