

Special features of the set 4388 and the instruments contained:

- Newly developed depth markers (868B) define the reduction depths (0.3 and 0.4 mm), resulting in a final preparation depth of 0.4 or 0.5 mm after finishing.
- The narrow parts of the working elements of the depth markers are coated with a layer of not excessively fine grain diamonds, thus ensuring high substance removal without excessive heat generation at the bottom of the prepared grooves.
- In addition, the set contains tapered medium grit (100 µm) diamond abrasives (868) and fine grain (30 µm) diamond finishing instruments (8868) to match the new depth markers. The depth markers, abrasives and finishing instruments are all congruent in size (taper with rounded tip).



- Two coordinated sizes cover all indications in the entire anterior zone.
- An egg-shaped diamond abrasive (379) and the matching finishing instrument (8379) allow the preparation of function-correcting palatal veneers.
- If required, excess composite can be removed under complete control with the particularly smooth-running separating instrument (852EF) or with the egg-shaped finishing instrument (379EF), both covered in extra-fine grit (grit size: 15 µm).

Depth reduction	Shaping
868B.314.018	868.314.012
868B.314.020	868.314.016
	379.314.023
Fine correction	Finishing
852EF.314.014	8868.314.012
379EF.314.023	8868.314.016
	8379.314.023



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Set 4388

“Keramik-Veneers.de” – a set of coordinated diamond instruments for the conservative, controlled preparation of ceramic veneers

Thanks to their convincing aesthetic properties, ceramic veneers are very popular in the USA. The provision of ceramic veneers has gained increasing popularity in Germany as well and has now become a scientifically acknowledged method for the restoration of anteriors and canines.*

One of the preconditions for the clinical success of ceramic veneers is a systematic, conservative preparation. This poses a particular challenge for the dentist: On one hand, a certain amount of material needs to be removed, on the other hand, care has to be taken not to penetrate too deeply into the enamel.

In cooperation with Private Lecturer Dr. Ahlers, we have developed innovative new depth markers which allow safe control of the penetration depth. These new instruments are compiled in the set 4388. This new set, called “Keramik-Veneers.de”, complies with the recommendations issued by the GSDOM (German Society of Dentistry and Oral Medicine) which serve as guidelines to ensure the high quality of preparations.

* For a scientific statement see www.dgzmk.de

** Natress, B.R., Youngson, C.C., Patterson, C.J.W., Martin, D.M., Ralph, J.P.; *An in vitro assessment of tooth preparation for porcelain veneer restorations.* Journal of Dentistry 23, 3 (1995) 165-170

Investigations in Great Britain have shown** that, under controlled test conditions, even experienced dentists do not always manage to maintain the required uniform substance removal to a depth of approx. 0.5 mm whilst reliably avoiding inadvertent dentin exposure.

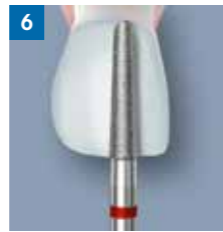
Labial veneer at a front tooth

1. First of all, labial orientation grooves are created with the new depth markers 868B.314.018/020, starting at the cervical third of the labial surface.

2. The narrow diamond coated parts of the working element allow easy creation of orientation grooves without excessive heat generation.

3. Even when applied at too steep an angle, the tapered shape of the working element and its rounded tip safely prevent excessive penetration.

4. The orientation grooves define the maximum substance removal desired, thus determining the level of the definite preparation.



5. The remaining bridges between orientation grooves can be levelled with the tapered diamond abrasive 868.314.016. This step is further facilitated by the congruent shape of the depth marker and the abrasive instrument. Thanks to its comparatively short working element, the diamond abrasive hardly vibrates during operation.

6. The set also comprises a diamond finishing instrument 8868.314.016 whose shape matches that of the shaping diamond instrument. This allows a particularly gentle, conservative levelling of the surface and further ensures the excellent quality of the preparation.

7. The instrument with a smaller diameter (868.314.012) is particularly suitable for shaping proximal preparation areas as well as smaller teeth, and especially for anteriors in the lower jaw. The set also comprises a matching diamond finishing instrument 8868.314.012.



Before:
Anterior in need of restoration



After:
Anterior with ceramic veneer in place

Palatal veneer on a canine

1. Within the course of a function correcting treatment schedule it is sometimes necessary to rebuild excessively worn tips of canines.* The egg-shaped abrasive instrument 379.314.023 with its elliptic tip – typically Komet – is particularly suitable for the creation of a gentle circular chamfer.

2. There is a congruent instrument even for this eventuality: the egg-shaped diamond finishing instrument 8379.314.023 allows a smoothing of the preparation, especially in the transitional areas of the incisal border, to ensure the high quality of the preparation.

3. The slight yet sufficient chamfer helps to ensure that the margins of the palatally adhered ceramic restoration are not too fine. The elliptic tip of the finishing instrument allows the creation of a shallow groove in the centre of the palatal surface as positioning aid during insertion.



Before:
Worn canine



After:
Canine restored to full function

Recommendations for use:

- To be used preferably in the red contra-angle, observing the speed indicated on the package.
- Always supply sufficient spray cooling (at least 50 ml/min.).