



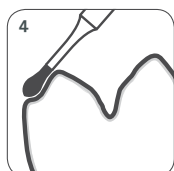
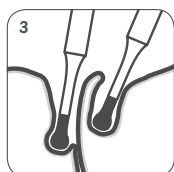
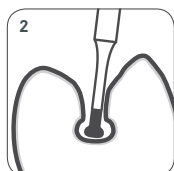
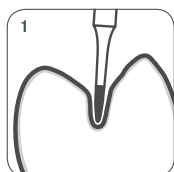
# Micropreparation | Kit 4337



Diamond instruments for minimally invasive cavity preparation as suggested by Dr. Neumeyer.

In cooperation with Dr. Neumeyer we have developed instruments with smaller working parts and thin neck portions by using a special high-tensile steel.

These instruments are specially suited for minimally invasive and precise shaping of cavities and cavity margins. At the same time, a maximum of sound tooth substance will be preserved. Magnifying glasses or a microscope ensure good vision.



Depending on the desired material reduction or surface roughness, these instruments are available in medium grit (Kit 4337) and fine grit (Kit 4337F). Small instrument sizes (889M/838M/830RM) are used for treatment of fissure caries, as well as for substance-preserving opening of larger, deep carious defects (1).\*

Moreover, they can be used for hard-to-reach areas and selective preparations like bevelling of cavity margins in the proximal area or preparations of the hard tooth substance near the pulp in extremely deep cavities.

Due to the elliptic shape of figures 953M/953AM cavities for undermining caries can be excavated in an ampoule-like shape(2).

The special shape and the diamond coated neck of the instruments 830M/953M/953AM enable you to realise rounded surfaces with undercuts, particularly when trimming inner proximal areas (3).

With the adhesive restoration technique cavity margins should be rounded in order to equilibrate tension between restoration and hard tooth substance. This can perfectly be done with the pear-shaped instrument (830M) (4).

\* Kit 4383 is recommended for the elimination of dentine caries.

**Clinical sequence:**

1. Initial situation: Undermining fissure and proximal caries in tooth 46.
2. Minimally invasive opening and detection of the size of the carious defect with instrument **889M**.
3. Excavation of minimally undermining fissure caries with the pear-shaped instrument **830RM.314.009**.
4. Optimal vision even in deep areas due to the extremely thin instrument necks permitting good flow of coolant. Preparation with instrument **953M.314.014**.
5. Completed undermining cavity in tooth 46, occlusal view.
6. Aesthetic and anatomically perfect composite restoration in teeth 45 and 46.



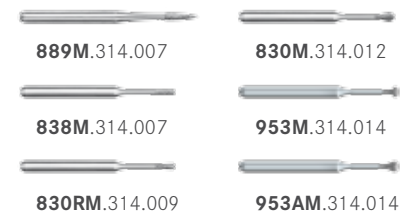
**Recommendations for use:**

- recommended speed in the red contra-angle:  $\odot_{opt}$  1 60.000 rpm
- use sufficient coolant (min. 50 ml/min).
- Apply low contact pressure in order to avoid instrument breakage (< 2N).

Literature:  
Dr. Neumeyer, Stefan:  
*Minimalinvasive Präparationstechnik; ZWR, 3/2001.*

Dr. Neumeyer, Stefan:  
*Minimalinvasive Restaurationstechniken; ZWR, 7+8/2003.*

**Kit 4337.314**  
also available with FG short shank  
(Kit 4337.313)



**Kit 4337F.314**

