

Basic rules of the preparation of cavities:

1. Access to the cavity (standard diamonds, high speed handpiece)
2. Outlines (prevention of extension in case of amalgam)
3. Excavation of carious dentin (round bur or excavator, slow speed)
4. Retention (it means that the filling must not fall out)
5. Resistance (the filling as well as the remaining tooth structure must not break)
6. Finishing of the borders (we prepare the retentive border for composite materials, no retentive border for glass ionomers and amalgam, the red coded diamond bur should be used).
7. Final control – after washing and drying, good illumination.

Diamonds:

Black :extra coarse,

Green :coarse

Blue: standard

Red: fine

Yellow: extra fine

White: ultra fine

Handpieces:

Turbine. 300.000 rpm. For preparation of the outlines esp. in enamel, removal of old fillings

Micromotor: max 40.000 rpm. The handpiece can gear the rpm:

Blue : 1:1 (no too slow, no too fast)

Red: 1:5 to fast

Green: 1:1,7 or 2,5 to slow.

Principle of the connection between the filling material and hard dental tissue:

Composite: micromechanical

Glass ionomers: chemical

Amalgam: macromechanical