

# Cast metal restorations

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# Cast metal inlays, onlays

gold (22 carat);  
gold alloy (platina);  
silver-palladium

# General rules

- minimal invasivity;
- inner edges, corners are rounded;
- supragingival margins;
- finishing line wouldn't touch the antagonist;
- finishing line on sound tooth structure;
- no undercuts or undergoing areas;
- occlusal wall divergency;
- question of cusp reduction;
- infixing direction
- dovetail-retention, isthmus;
- retention: friction

# Tools of preparation

inlay burs with rounded tips (diamond or hard metal) →  
occlusal divergency;

flame shaped fine diamond bur;

(hand instruments)

3-5° divergency

comfortable access form

① preparation started on occlusal surface;

② interproximal cassettes/boxes;

③ specifying borderlines;

④ removal of decayed dentin, previous fillings, underliners;

⑤ secondary retention elements?;

⑥ 0,5-1mm beveling      - gingivally 30°  
   - occlusally 40°



primer preparation

secondary preparation

width

initial depth

cavosurface margin

infixing direction

proximal grooves

slot

skirt schliff

# Cusp reduction – onlay

reduction is the first

secondary retention elements are recommended

guiding grooves

with contra angle

# Cusp reduction – overlay

collar; skirt schliff on non-functional cusp

# Cementation process of metal inlays

- checking on cast
- checking in mouth, finishing&polishing
- isolation, cementation