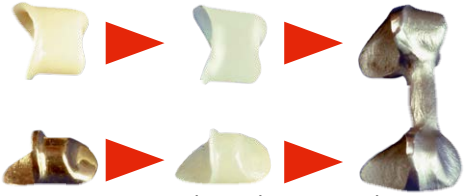
# Friction-generating coping

(acc. to DTM **Us**enko/Horn**ig**)

**Thermoformed plastic friction-generating coping out of special plastic for the telescope and attachment technique:**

Placement of the Usig friction-generating coping:



primary crown | Usig-coping | tertiary structure

## Materials & Accessories

**Fabrication:**
- Erkodur-A3, 0.6mm
- Commercial attachment glue and metal primer
- Filling granules, fine, 1.3 kg, (110 861)
- Erkoskin, 50 ml, (625 050)

**Finishing:**
- Usig-die disc (650 030)
- HSS-twist drill, 3 pieces, (110 876)
- Liskoid polishing discs, 6 pieces, (223 205)
- HM spherical bur, 1 piece

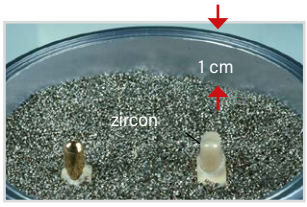
## Important hints

**The required conditions for a good result are**:
Milling angle 0 - 1°
- Per telescope at least 2 parallel surfaces (approximal 3 mm, lingual resp. palatinal 2 mm height).
- For even wall thicknesses of the friction-generating coping a vertical adaptation in the thermoforming unit is required.
- If the foil is thermoformed without spacer foil the friction is considerably increased. In case of more than 5 pillars, very long primary crowns, loose pillars and implants the foil should be thermoformed together with the spacer foil.
- The foil bonds to denture resin (for ex. for replacement / travel dentures).
- Do not steam the friction-generating copings or expose to other heat (if so, only with inserted primary crown or filled with kneadable silicone).
- To avoid wrinkles in the foil the model pot must only be filled up to 1 cm below the edge with granulate (1.), work with the Usig-die disc and place the discs correctly (avoid center).

## Instructions: (exemplary representation of the fabrication)

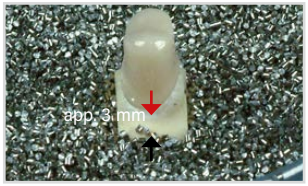
## Thermoforming of the friction-generating copings:

Same way of fabrication of Usig friction-generating copings on primary crowns out of metal or zircon.



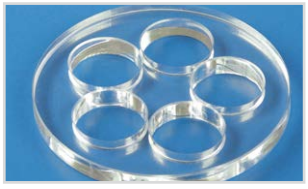

**1.** Place primary crowns as illustrated and align vertically ...

... below the primary crown edge keep approx. 3 mm free from granules.



Without Usig-die disc use fine granules (110 861).

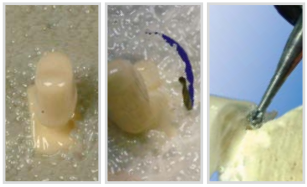
The Usig-die disc (650 030) provides for a better fixation of the dies in standard or fine granules ...



... resulting in thicker walls and less wrinkling.

**2.** Thermoform the foil with the isolation foil showing towards the primary parts.

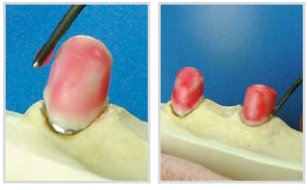
**3.** Cut out the coping area with the HSS twist drill (110 876) and below the preparation area with the spherical bur.

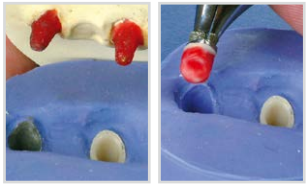


**4.** Finish the edges with Liskoid (223 205).

## Duplication of the primary parts with Usig friction-generating copings for the classical fabrication of the tertiary structure

**5.** Wax-up a thin layer (approx. 0.2 mm) as spacer onto the copings for the later needed glue.
(Do not use Erkoskin, bonds to the duplicating compound.)





**6.** Duplicate. Take off the primary parts with the copings.
Fabricate the tertiary structure in common manner on the duplicate.