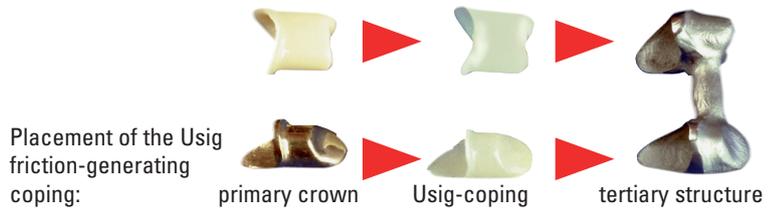


USIG Friction-generating coping

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



Materials

Fabrication:

- Usig-foils, 20 pieces, (650 005), Ø 120 mm, thickness 0.5 mm
- Usig-glue, 5 g, (650 010) • Usig-Primer, 5 ml, (650 025))
- 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)
- Usig-HM spherical bur, 1 piece, (650 015)

Hints

The required conditions for a good result are:

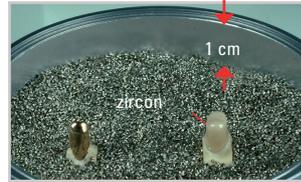
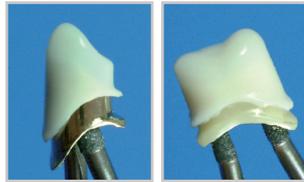
Milling angle 0 - 1°

- 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 Usig-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 Usig-foil bonds to denture resin, Resilit-S liquid (817 501), powder rose (817 502) (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)

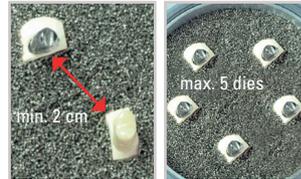
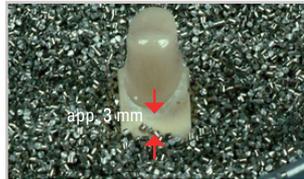
Thermoforming of the friction-generating copings:

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 app. 3 mm free from granules.



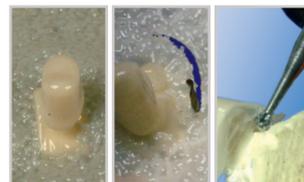
Without Usig-die disc use fine granules (110 861).

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



... more even wall thicknesses and less wrinkling are the results.

2. Thermoform the Usig-foil with the isolation foil showing towards the primary parts.



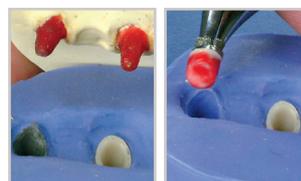
3. Cut out the coping with the HSS twist drill (110 876) and below the preparation area with the spherical bur.



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 (app. 0.2 mm) as spacer onto the copings for the later needed glue. (Do not use Erkoskin, bonds to the duplicating compound.)

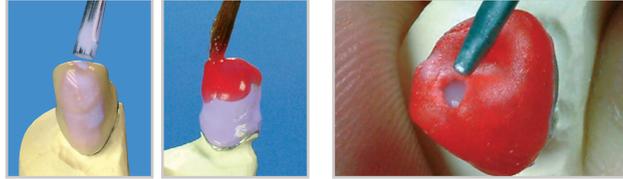


6. Duplicate (for ex. with Secosil, 411 100). Take off the primary parts with the copings. Fabricate the tertiary structure in common manner on the duplicate.

Fabrication of the tertiary structure with Erkoskin and modelling resin

7. Apply a single layer of Erkoskin (625 050) on the coping and after complete hardening (app. 5 min.) ...

8. ... apply modelling resin.



9. To take it off the coping work incisally or occlusally a whole into resin. Remove Erkoskin and grind the modelling resin coping thin ... Fabricate the tertiary structure in the usual way.

Glueing of the Usig friction-generating copings into the tertiary structure.

10. Insulate the Usig copings at the inside with Vaseline and put them on the primary crowns.

11. Cut glue exit slots into the tertiary structure.

12. Apply primer (650 025) at the inside of the tertiary structure (650 025), allow to well flash off.

13. Apply primer at the outside of the friction-generating copings. It should still be humid when glueing.

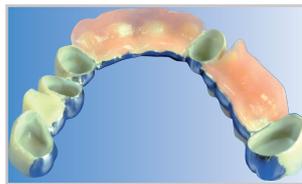
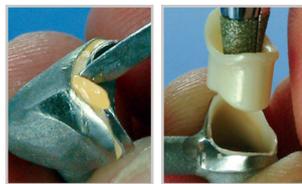
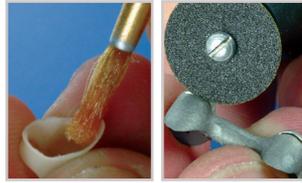
14. Fill a little Usig-glue (650 010) into the tertiary structure using the mixing tip.

15. Press the tertiary structure onto the primary parts where the Usig copings are positioned.

16. Remove residual glue.

The primary crowns can be taken off with the telescope crown pliers.

17. Finished patient case with Usig friction-generating copings glued in. **Do not steam the copings.** If necessary, clean with alcohol.



Usig-Primer:

Application: Sandblast the telescope inner surfaces with aluminium oxide (50 µm, 2 bar) and blow out with oil-free compressed-air, allow to completely dry. Generously apply Usig-Primer with a brush and allow to flash off for app. 1 min.

Storage: The material should be stored at 5-35 °C. Close the bottle properly immediately after use and protect against the effects of direct light. Durability, see label.

Usig-glue to glue the Usig friction-generating coping in the tertiary part. There has to be a slot (0.2 mm) for the glue. This slot guarantees a tension-free fit and will be filled by the glue.

Application: Put on the mixing cannula and press out the needed quantity, the mixing cannula shall remain onto the syringe as a closure after use. When mixing by hand the two components must not get into contact with each other in the outlet area.

Working time from starting mixing: app. 3 min. (also when handmixing with a spatula).

Beginning of setting: after app. 4:30 min. • **Finish of setting:** after app. 8 min.

The indications are valid at a room temperature of 22 °C. Higher temperatures accelerate, lower temperatures decelerate the setting. The object must not be moved from the beginning of the setting until it is hardened.

Storage in a refrigerator at 3-8 °C ensures a durability of 2 years.

Restoration of the friction

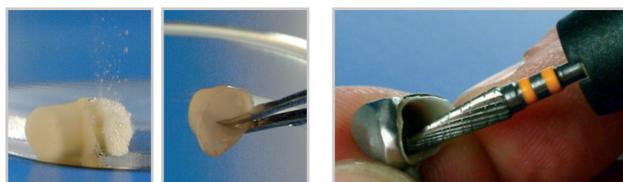
18. For a later restoration of the friction produce a duplicate of the primary situation in the mouth and single dies.

19. Thermoform as described in point 1 and 2.

21. Remove plaster with plaster removing agent.



20. Finish the copings as shown in point 3 and 4. The copings can also be cut out with the scalpel. Separate the plaster die.



22. Take the old copings off and glue the new copings in as described in point 10 to 15 without glue exit slot.