

# Casting objects, copings

## Materials & Accessories

### Fabrication:

- Erkolen, soft 0.5/0.6/0.7 mm, with shrinkage compensation foil 0.1 mm applied ex works
- Erkodur, hard, 0.5/0.6/0.8 mm, with shrinkage compensation foil 0.1 mm applied ex works (also possible, Erkodur-C, 0.5/0.6/0.8 mm with UZF-Cast spacer foil, clear 0.10 mm)
- Possibly, UZF-Cast spacer foil red, 0.10 mm or brown 0.15 mm
- Erkopor foam rubber discs (110 842)

### Model preparation:

- High-fusing wax (725 080) for filling bubbles in the plaster, die spacer

### Finishing:

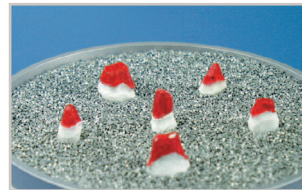
- HSS twist drill (110 876), scalpel

## Hints

- The applied spacer foils compensate shrinkage of the foils which arises during the cooling procedure. Additional space for cement needs to be created extra (die-spacer).
- For dies with pins the die model disc is used, Erkopor serves for better ventilation and helps to avoid creases in the material.
- Some pin and model systems do not fit into the holes of the die model disc. These dies are embedded into the fine granules. The distance between the dies should be at least 2 mm and the margin should be at least 5 mm above the level of the granules.
- Scalpels, rolling knives or scissors crush the material when cutting. This can lead to deformations. Recommendation: cut out along a marked line with the HSS twist drill.
- The perforation of the possibly used UZF-Cast spacer foil avoids air bubbles between the foils.
- It is controversial whether the extension of the copings should be until the preparation limit or shorter, therefore we do not give any recommendation.

**1.** The die model disc has 7 holes filled with silicone mass to put the pins in.

If this is not possible...



**2.** ...the dies are put into granules (granules, fine 110 861). Compress the granules well to avoid holes in the foils and to avoid that the dies sink during thermoforming.

**3.** Only die model disc: Put the dies through the Erkopor disc into the silicone mass.



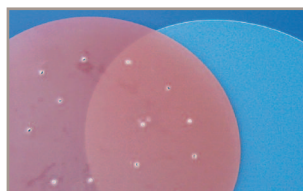
**4.** Ensure that the dies are put in a vertical position. Oblique dies may cause creases.

**5.** Erkodur and Erkolen are ex works provided with a shrinkage compensation foil.



**6.** Thermoform, allow to cool down and continue at step **9**.

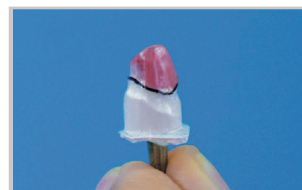
**7.** Foils without shrinkage compensation foil: Perforate the UZF-Cast spacer foil several times between the dies using a scalpel or a needle.



**8.** ...insert both foils into the foil frame and thermoform. After thermoforming it does not matter if there is air between the foils. Here Erkolen with UZF-Cast red.

With the spacer foil towards the dies...

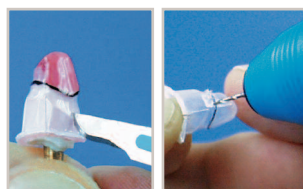
**9.** Remove the Erkopor foam rubber disc cautiously. The Erkopor is reusable.



**10.** Cut out the dies. Mark the preparation limit...

**11.** ...cut several times with the scalpel nearly up to the preparation limit and remove the copings.

Cut out the final form with the HSS twist drill.



**12.** Finished coping (see last point of the hints).