

Individual impression trays (functional trays), base plates (bite plates)

Materials & Accessories

Fabrication:

- Recommendation for individual impression trays:
Erkoplast PLA-W, white and Erkoplast PLA-T, transp., 3.0 mm (upper jaw), 4.0 mm (lower jaw)
- Recommendation for base plates:
Erkoplast PLA-R, 1,5
- Erkoplast PLA-T, transparent, allows to recognize pressure areas at the tray.
- As spacer Erkopor black, 8 mm (110 901) for Erkopress- and 3 mm (110902) for Erkoform-units.
- PLA-handles (222 500 high / 222 550 flat) out of plastic.
- Wax bite rims for bite plates (hard 75 63 00, medium 75 63 02, soft 75 63 03).



Model preparation:

- Erkogum (110 844) for blocking out and for covering the residual teeth, high-fusing wax (725 080) for filling bubbles in the plaster.

Finishing:

- Fissure bur, rightward cutting, left spiral (110 836), coarsely crosscut tungsten carbide bur (110 833) for grinding and Liskosil-I (223 240) or Lisko-B (223 300) for smoothing the edges. Liskosil-m (223 230) or Liskoid (223 205) for smoothing the areas around the PLA-handle.
- Erkogum (110 844) for blocking out and for covering the residual teeth, high-fusing wax (725 080) for filling bubbles in the plaster.

Hints

- Model areas (exterior vestibulum, oral floor) which obstruct the thermoforming process have to be removed. Remove sharp plaster edges.
- Carefully block out residual teeth and undercuts.
- If stops are required, cut holes into the spacer (Erkopor black) in the area of the ridges (using punch pliers).
- If the models are placed into the granules, trimming the models is not necessary.
- The impression of the Erkopor black and the smoothing of the edges with Liskosil-I improves the retention for impression materials at the tray.
- Tray handles out of plastic reinforce the lower jaw tray when there is a flat ridge.

Individual impression tray

Thermoforming material: Erkoplast PLA-W, white und Erkoplast PLA-T, transparent 3.0 mm (upper jaw), 4.0 mm (lower jaw)

- 1.** Block out residual teeth and undercuts with Erkogum.

Recommendation: Embed the model so far into the high grade steel granules that the tooth alignment plus 3 mm protrude from the granules.



- 3.** Place the Erkopor black spacer directly onto the model.



- 2.** If the model is placed onto the model disc, put the black rubber spacing ring around the flat trimmed model base.

For better removal put some Erkogum to the rubber ring.

- 4.** Thermoform and allow to cool down.

Before finishing, the application of the PLA-handle during or after thermoforming will be shown.

- 5.** The PLA-handle bonds reliably by heat with the tray material.

PLA-handle and ridge should roughly fit together ...



- 6.** ... if necessary, adapt handle by heating with the hot air burner.

- 7.** Immediately after adaptation press the PLA-handle ...



- 8.** ... into the hot, plastic tray material.

- 9.** Later application of the PLA-handle after the thermoforming process. For heating the thermoformed plate with the spacer have to be left on the model!



- 10.** Heat with hot air burner and press the PLA-handle into the hot, plastic tray material.

11. Remove thermoformed plate and pull the spacer off.

Cut out the desired shape with a fissure bur, possibly mark it before.



13. Finished, individual impression tray with PLA-handle high.



12. Use the coarsely crosscut tungsten carbide bur (110 833), (>15 000 rev/min) to work on the final shape and the edges.

Smooth the edges with Liskosil-I (10 000 rev/min).

Finished, individual impression tray with PLA-handle flat.



Base plate (Bite plate)

Thermoforming material: Erkoplast PLA-R, rose, 1,5 mm

14. Procedure as described in step 1-4, however, without spacer.

Finishing as described in step 11 and 12.



15. Finished base plate (bite plate) with wax bite rim.

