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

Materials & Accessories

Fabrication:
- Recommendation for individual impression trays: Erkoplast-O, 3.0 mm (upper jaw), 4.0 mm (lower jaw)
  Erkorit, 2.5 mm (upper jaw), 3.5 mm (lower jaw)
- Recommendation for base plates: Erkoplast-R, 1.5 and 2.5 mm
  Erkoplast-O, 1.5 and 2.5 mm
- Erkoplast-O and Erkorit have at the same thickness more torsional strength than Erkoplast-R.
- Erkorit is crystal clear and allows to recognize pressure areas on the tray.
- As spacer Erkopor, 8 mm (110 842) for Erkopress- and 3 mm (110 845) for Erkoform-units
- LG-tray handles (222 950) out of plastic, LG-Primer (222 960), tray handles out of aluminium (short 222 857, long 222 858, plastic for lower jaw 222 901)
- Wax bite rims for bite plates (hard 756 300, medium 756 302, soft 756 303).

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
- Rubber spacing rings (110 846) when using the model disc

Finishing:
- Fissure bur, rightward cutting, left spiral (110 836), crosscut tungsten carbide bur (110 837) for grinding and Lisko brown (223 102) for smoothing the edges. Lisko-S (223 200) and Liskoid (223 205) for smoothing the areas around the LG-tray handle.

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) 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 and the smoothing of the edges with Lisko brown 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-O, 3.0 mm (upper jaw), 4.0 mm (lower jaw), Erkorit, 2.5 mm (upper jaw), 3.5 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. Put the Erkopor spacer directly onto the model.
   (Contrary to previous details the Erkopor does not have to be humid!)

5. The LG-Primer and heat ensure a safe bonding of the LG-tray handle with the tray material.
   LG-tray handle and ridge should roughly fit together...

7. Apply Primer app. 1 min. before application.
   Immediately after adaptation press the LG-handle...

9. Application of the LG-handle after the thermoforming process. For heating the thermoformed plate with the spacer have to be left on the model!
   Apply Primer app. 1 min. before adaptation.

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 LG-tray handle during or after thermoforming will be shown.

6. ...if necessary, adapt handle by heating.

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

    Press the LG-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.

12. Use the fine crosscut tungsten carbide bur (> 20 000 rev./min.) to work on the final shape and the edges.
Smooth the edges with Lisko brown.

13. Tray-handle out of aluminium, long: Put the tray with spacer onto the model and adapt the handle. Heat the handle base over a flame, press it into the plastic and and flatten the fused material that extrudes.

14. Tray handle for stiffening the lower jaw tray: Adapt to the model by heating, fix with sticky wax (745 040) or Erkogum and thermoform the tray material onto it.

15. Finished, individual impression tray with LG-handle.
...with long handle out of aluminium

16. ...with short handle out of aluminium
...with stiffened handle out of plastic.

17. Procedure as described in step 1 - 4, however, without spacer.
Finishing as described in step 11 and 12, use Lisko-S instead of Lisko brown.

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

**Base plate (Bite plate)**

Thermoforming material: Erkoplast-R, 1.5 and 2.5 mm, Erkoplast-O, 1.5 and 2.5 mm