# Aligner/correction splints and retainer

## **Materials & Accessories**

#### Fabrication:

- Erkodur-al, hard, 0.6 1.0 mm Erkoloc-pro, hard/soft, 1.0 and 1.3 mm
- Erkodur, hard, 0.5-1.0 mm (0.5-1.0 mm aligner/correction splints/0.6-1.0 mm retainer/0.6 and 0.8 mm Essix retainer)

# Finishing: 😨 😭

Take-off pliers (110 880) to lift splints from the model, HSS-twist drill (110 876) or Special scissors XL (220 301) for cutting out the desired shape, Liskosil-I (223 240) for prepolishing, Liskosil-m (223 230) for narrow areas Liskosil-s (223 220) for occlusal interferences and inner surfaces of a splint.
Two times Lisko white (223 100) for smoothing the edges of the aligners.

**1. Aligner:** Place print models centrally onto the model disc and thermoform according to the unit instructions with e.g. Erkodur/ Erkodur-al 1.0 mm.

**3.** Recommendation for cutting out: The scissors if the final shape of the aligner shall have a rather straight line at the gingiva. The HSS twist drill if the final shape shall follow the gingival margin.

**5.** Smooth borders that follow the gingival margin especially in the interdental areas with Liskosil-m or Liskosil-s. Latest now remove the insulating foil.



**2.** Lift the foil if necessary using the take-off pliers from the model and roughly cut with the special scissors XL (220 301). Then cut out the final shape of the aligner with the scissors or with the HSS twist drill (>20 000 rev/min).

**4.** Splint borders with a rather straight line shall be smoothed best with Lisko polishing discs, fine, white (10 000 rev/min). Therefore 2 Lisko white discs are mounted on a mandrel with the supporting discs.

6. Finished aligner.

Pay attention to the cleaning and maintenance instructions.

### Hints

- There are many ways of fabricating a retainer, here is only a small selection. Most can be fabricated with the thermoforming technique and correspond mostly to stabilization splints. Example, a retainer that does not have a negative effect on the occlusion (Erkodur 1.5 mm).
- With the help of the Occluform it is possible to imprint the opposing bite in Erkoform units during thermoforming. Proceeding very fast this is even possible from material thicknesses of 0.8 mm and more. Such retainers will not interfere the occlusion negatively.

**1. Retainer:** Mark the dimensions of the retainer. Before, determine in the articulator where the bars between the vestibular and palatinal area can be placed without interfering with the occlusion.

**3.** Finish the edges with the tungsten carbide bur (if clasps are included: Attention, the tungsten carbide bur may damage the clasps).

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

**5.** Finished retainer with bars out of wire that does not have a negative effect on the occlusion.



2. Cut out the splint, the occlusal surfaces and the bars using the HSS twist drill without pressure (> 20 000 rev/min).

**4.** Finished retainer with bars out of thermoforming material, not influencing the occlusion.

Pay attention to the cleaning and maintenance instructions.

**6.** The Essix retainer is a thin splint reduced to the frontal area. The fabrication is analogical to the fabrication of stabilization splints.

