

LAB APPLIANCE FABRICATION REQUIREMENTS

METAL APPLIANCES

General Guidelines

Prescriptions

Please provide complete and signed Rx with every case.

Impression

- Accurate impressions with any kind of impression material are acceptable.
- Impressions must adequately reflect **all relevant** anatomy.
- Impression material **must not** be separating from the impression tray.
- Consider pouring your models right away if your impressions are moisture, temperature or time sensitive.
- Impressions sensitive to moisture content should be wrapped in a damp paper towel and placed in a sealed plastic bag if models are not poured immediately.
- Only metal impression trays and those with PVS impression material will be returned.

Models

- Plaster or stone models are acceptable. Generally, the durability of the stone is preferred.
- Models should be reasonably trimmed, yet sufficiently thick for strength considerations.
- No horse shoe shaped models; all models should have bases of at least 7mm in the thinnest area.
- Bases will be added as necessary, for an additional fee, to the models without bases or lacking adequate base thickness or strength.
- Please indicate if your model must be duplicated, as work models may get damaged during appliance fabrication process.

Bite Records

- Please package bite registrations carefully.
- Bite records **must not** be left between models for shipment to the lab.
- Dedicated packaging should be considered for brittle materials such as Delar wax.
- Please identify the nature and the intent of each bite record, if more than one is being supplied.
- Please consider mounting the maxillary model, before sending it to the lab, for those cases requiring mounting. Sending such items as face bows, bite forks and mounting jigs through the mail often results in unreliable mountings.

Articulators

We use following articulators and their accessories in our laboratory:

- SAM 1, SAM 2, SAM 3
- Danar
- Panadent
- Whip-Mix
- Hanau
- Stratos 200
- Artex
- Kavo

**Please consider that fully mounted models may not transfer perfectly from your articulator to the one in the lab.

Materials and Components

- (*)Biocryl resin - Cold Cure Acrylic - MMA (Methyl methacrylate)
- Clear Biocryl – Thermo formable PETG (Polyethylene terephthalate glycol)
- Colored/patterned Biocryl – Thermo formable PVC (Polyvinyl chloride)
- Splint Biocryl – Thermo formable PETG.
- Triad® (Visible Light Cure)
- Mouthguard material – Thermo formable EVA (Ethylene vinyl acetate)
- (*)Duraloy – Cobalt/Chromium alloy
- (*)Stainless steel – Chromium/Nickel alloy
- (*)NiTi - Nickel Titanium alloy
- TMA – Titanium/Molybdenum alloy
- Menzanium – Nickel-free stainless alloy
- (*)Silver solder

(*) material is potentially allergy causing in sensitive patients

Metal Appliance

Technical requirements

- Opposing model is required for cases with inter-occlusal plastic or potential inter-arch interferences (pontics, habit breakers, etc).
- Bands/Crowns already on the model are preferred.
 - We will adapt your bands/crowns to the model, if they are not on the model already, or provide our bands/crowns if requested.
- Centric occlusion or a treatment specific bite record is suggested when supplying the opposing model.

Default materials

- Duraloy
- Stainless Steel
- NiTi alloy (used in IPC and Distal Jet appliances)
- TMA (used in Pendulum-like appliances)
- Silver solder
- Clear Cold Cure Acrylic

Practical considerations

- When supplying bands/crowns separately, models or impressions should reflect the teeth with no hardware in place.
- Consider path of insertion! Bands/crowns are fitted individually, but delivered as a unit, and must have a shared path of insertion.
- Your finished appliance may have some silver solder and/or laser welded joints.