bench**MASTERY**

OOO STEP-BY-STEP PRIMOPATTERN

A light touch

Creating a precise implant bar using Primopattern light-cured modeling resin

Information provided by Primotec USA

Formulated with optimal strength and accuracy,

Primopattern single-component light-cured universal modeling resin is available in a syringeable modeling gel and a modeling paste. As a modeling gel, it is applied directly from the syringe, usually to buildup copings and implant abutments; as a modeling paste, it offers a clay-like consistency and can be applied, formed, or adjusted with fingers or hand instrument. The material burns out cleanly and completely for casting or pressing, can be scanned with either a laser or probe scanner, and works well for zirconia copymilling systems.

Primopattern is used at room temperature, which reduces the risk of distortion because no heating is involved as with wax and there is no mixing of materials (i.e., powder and liquid of PMMA modeling resins). It has a long working time of more than 20 minutes and

a short curing time of less than 5 minutes. It does not contain any MMA or peroxide and has no taste or smell. If needed, it can be used in conjunction with conventional waxes or light-cured wax (e.g., Metacon).

Following are steps for creating an implant bar. In this case, six Nobel Direct implants were placed in an ideal position due to a successful backward planning with the Nobel guide implant navigation system (Fig. A).

Block-out the screw channel of the implant post with wax.

Build-up the implant copings with the syringeable Primopattern gel (Figs. B, C).



Primopattern

Features

- · Ready to use single-component modeling material
- Stays where it is placed without running
- Cures in conventional light-curing units without heat
- Polymerization-neutral with absolute dimensional stability and optimal fit
- No distortion, high surface hardness, exceptional strength
- Burns out cleanly and completely

Primotec USA

www.primogroup.ne

25 Sylvan Road South Suite N Westport, CT 06880 866-643-3129



Fig. A Six Nobel Direct implants placed in ideal position due to backward planning.



Fig. B Unlike wax, the Primopattern gel does not pull away from the margins.



Fig. C The viscous, thixotropic gel can be directly applied by syringe without slumping.



Fig. D Trimming and shaping after light-curing is done with carbide burs or rubber polishers.



Fig. E The material does not show any clinically relevant light-cure shrinkage.



Fig. F The paste consistency, similar to soft putty and not sticky, allows for hand shaping.



Fig. G The bar is formed by hand and placed on the alveolar ridge.

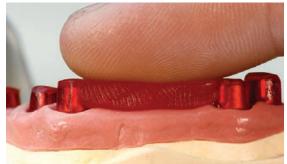


Fig. H The paste molds directly to the light-cured gel on the copings.



Fig. I The three bar segments are connected then light-cured as one piece.

Once the coping is built-up, light-cure the material and adjust if necessary (Fig. D).

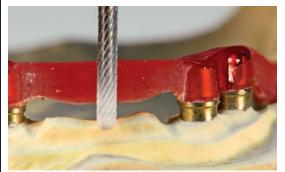


Fig. J The bar can be milled immediately following curing.



Fig. K Any corrections or reinforcements can be made with the syringeable gel.

Prepare the remaining five copings in the same manner. *Note*: Because the Primopattern material polymerizes towards the light, the copings fit without gripping the abutments (Fig. E).

Create the bar segments using Primopattern paste where larger amounts of material need to be applied. *Note:* The modeling paste also is suitable for use on pontics, transfer or insertion guides, implant jigs, verification indexes, etc.

Use a small amount of paste to create the bar by hand (Fig. F) and then place on the alveolar ridge (Fig. G). *Note*: The material has a consistency similar to soft putty, is not sticky, and can be easily shaped by hand.

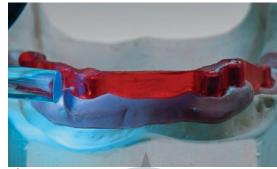


Fig. L The corrections can be stabilized by prepolymerizing using a hand-held lab curing light.

Adapt the paste to the already made copings (Fig. H).

Build-up the posterior bar segments in the same way as the anterior bar (Fig. I). The case is ready to be light-cured together as a single unit.

After light-curing, the bar can be easily removed to check for fit and milled (Fig. J).

When the milling is complete, make any corrections by applying the gel (Fig. K) and then re-light-curing with a hand-held lab light (Fig. L).

The finished bar fits perfectly and can be either sprued and cast, pressed, scanned, or copymilled (Fig. M).



Fig. M The completed bar can be sprued for casting or pressing, scanned for CAD/CAM processes, or copymilled.

ADVANSTAR COMMUNICATIONS

For Client Review Only. All Rights Reserved. Copyright, Advanstar Communications Inc

dlpmagazine.com May 2010 dentallab products