



## Surgical Guide Technique

*Safety glasses should be worn for all lab procedures as well as gloves when handling acrylics. Items featured in this technique are found on the last page.*



- 1 Select a denture tooth that best fits the implant site.



- 2 Trim tooth to fit space.



- 3 Use a light cure material to secure tooth to implant site. Use only enough material necessary to secure the tooth. Remove excess. Check occlusion. Once the desired tooth position is achieved, cure it in a ProCure oven.



- 4 Select a piece of splint biocryl. In this case, a piece of 1mm splint biocryl is selected. Remove the protective coating from both sides of the material.



- 5 Place the material on the pressure chamber and secure it with the clamping frame.



- 6 Enter the heating time of 30 seconds into the MiniSTAR or Biostar and swing the heating element over the pressure chamber to initiate the heating cycle.



- 7 Once the heating cycle is complete, remove the heating element and swing the chamber over the model. Lock the chamber in place by turning the locking handle toward the front of the machine to activate the 60 lbs. of positive pressure and the cooling phase. The positive pressure of the MiniSTAR ensures the most accurate fit possible..



- 8 At the end of the cooling phase, evacuate the air pressure from the chamber and unlock the chamber by turning the locking handle toward the back of the machine. Slide the clamping frame to the left to release the material and swing the chamber back to its open position. Do not remove the model from the matrix.



- 9 With a lightning disc in a lab handpiece, trim the material approximately 2mm below the gingival margin on buccal and lingual surfaces. Trim to the distal margin of the last tooth on each side.



- 10 With a lab knife, remove the matrix from the model. With a spatula, remove the denture tooth from the model.



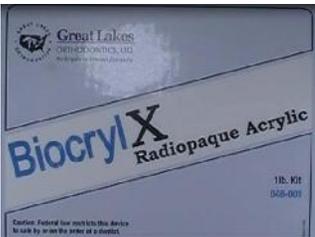
- 11 With a shear, trim matrix to the desired shape.



12 Finish the edges of the matrix with a Dimo wheel in a lab handpiece.



13 Place matrix back on model to make sure that it seats properly.



14 If you would like to use the surgical guide as a scan prosthesis as well, Biocryl X, a radiopaque acrylic, can be used.



15 Apply separator to the implant site.



16 Mix Biocryl X to a syrup consistency.



17 Add Biocryl X to matrix where the prosthetic tooth will be placed. Make sure the material does not flow into the adjacent teeth in the matrix. Place the matrix back on the model.



- 18 Place the model into a heated pressure pot for 15 minutes. Pressure pot temperature should be approximately 120° F and the pressure regulated at 20 psi. At the end of the curing cycle, release the pressure from the pot and remove the model.



- 19 Place a mark on the matrix indicating the central fossa of the prosthetic tooth. Remove the matrix from the model.



- 20 With a carbide cutting bur in a lab handpiece, drill straight down at the mark through the central fossa of the prosthetic tooth where the implant will be placed.



- 21 Cut the entire width of the tooth at that central fossa mark.



- 22 Eliminate remaining tooth structure from the central fossa wall toward the facial. This technique is recommended for a posterior implant. For an anterior implant, the lingual segment would be eliminated, still leaving the wall at the middle of the anterior tooth.



- 23 Where the matrix has been trimmed, finish the edges with the Dimo wheel in a lab handpiece to eliminate sharp edges.



- 24 The matrix is complete.

***Items featured in technique:***

235-010	Astro Spec Safety Glasses (reg./blue)
235-062	N-Dex Non-latex Gloves (Med)
017-001	MiniSTAR S® Scan
010-095	Lead Pellets
190-030	ProCure Light Cure Oven
021-025	1mm Splint Biocryl
048-001	Biocryl X Radiopaque Acrylic
075-004	Model Brush
175-027	Resimix Cup
165-004	Spatula
175-034	Separator
075-007	Separator Brush
170-005	Lab Knife
150-025	Lab Handpiece
086-043	Dimo PRO Grinding & Finishing Wheels
085-027	Cutting Bur
086-027	3/4" Lightning Disk
225-040	GLO Pressure Pot
220-023	No. 55 Plate Shears



800.828.7626 (US & Canada)  
716.871.1161 (Worldwide)  
716.871.0550 (Fax)  
E-Mail: [info@greatlakesortho.com](mailto:info@greatlakesortho.com)  
Website: [www.greatlakesortho.com](http://www.greatlakesortho.com)