

Sundance Dental Laboratory

Recommended technique for adjusting Solid Zirconia and IPS e.max

Adjusting occlusal or interproximal contacts is sometimes required at the time of try-in and/or post-insertion. If there is a minor occlusal adjustment needed, our suggestion is to use only a rubber abrasive polishing wheel and not a diamond. A diamond is needed only if there is a significant adjustment to be made.

If a diamond is used in this process, proper polishing of the surface is necessary to achieve a smooth surface. A polished ceramic / zirconia surface is less abrasive than one that is glazed, so there should be no need for re-glazing of the restoration.

The three key points for this procedure are:



Fine diamond

1. Diamond: Use a fine grit diamond in a friction grip slow speed hand piece. An electric hand piece is more effective than one that is air driven. Run the hand piece at 20,000 RPM with water spray. Avoid a high-speed hand piece because it will create excessive heat and trauma to the ceramic. A light touch is required to avoid excessive heat and vibration. You will then next need to use a rubber polishing wheel.



Medium Dialite



High shine Dialite

2. Rubber Polishers: We use Brasseler's Dialite LD (lithium dicilicate) and ZR (zirconia) series. Each have a medium and a high shine wheel. An electric hand piece should run at 10,000 RPM to a maximum of 15,000 RPM, with only light pressure used. Electric hand pieces have constant torque even at a slow speed, so they are more effective than air driven hand pieces. Begin the process with the medium shine wheel. This step should take approximately 30 seconds. Next use the high luster rubber wheel with the same technique as described above.



Polishing Paste

3. Polishing Paste: Polishing paste should be used with a bristle brush wheel in a slow speed latch hand piece. The product we suggest is the Brasseler Dialite Intra-Oral porcelain polishing paste. This is very effective for polishing the grooves in the posterior anatomy.