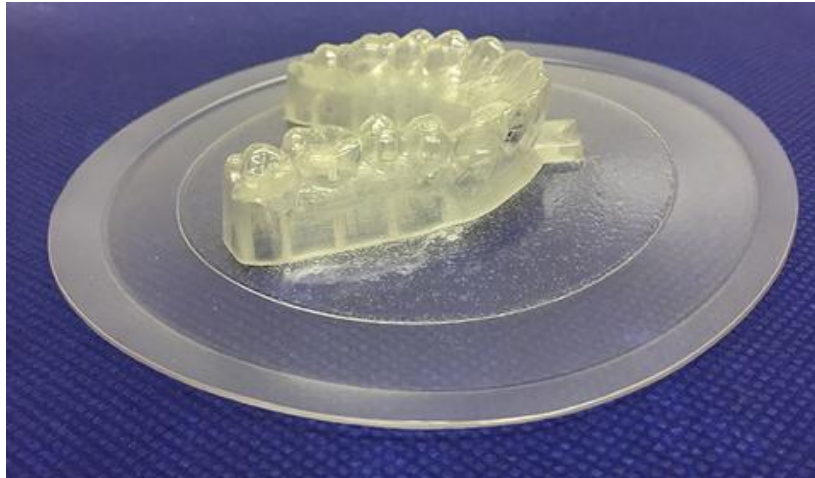


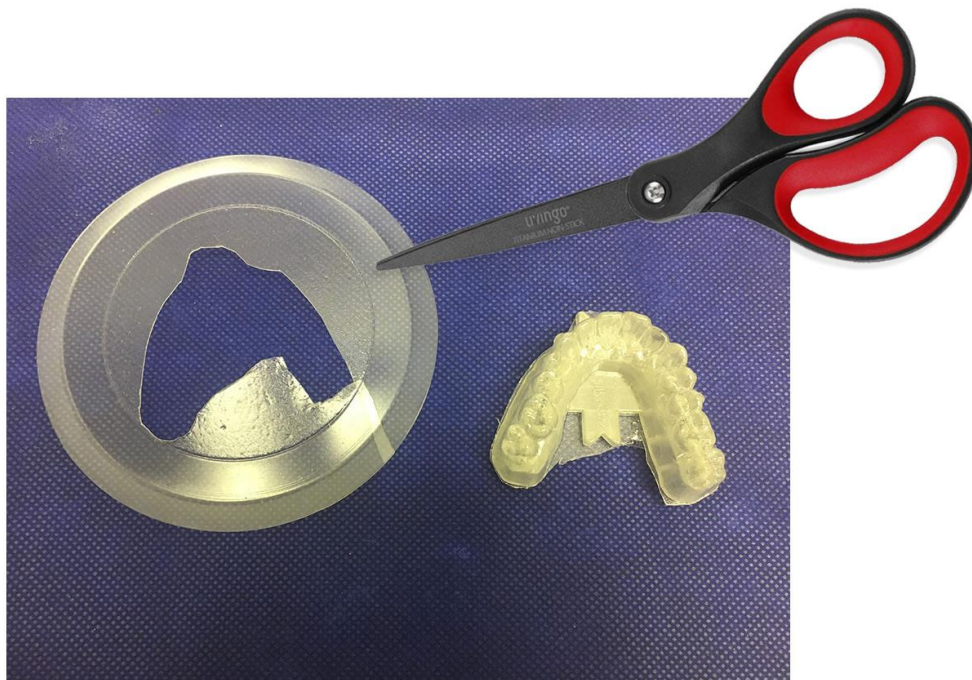
CUTTING, TRIMMING AND FINISHING TECHNIQUES

We've gleaned the following best-practices for efficiency and reproducibility from our customers over the years. If what you are currently doing works well for you, don't feel obligated to change your process to match our suggestions.

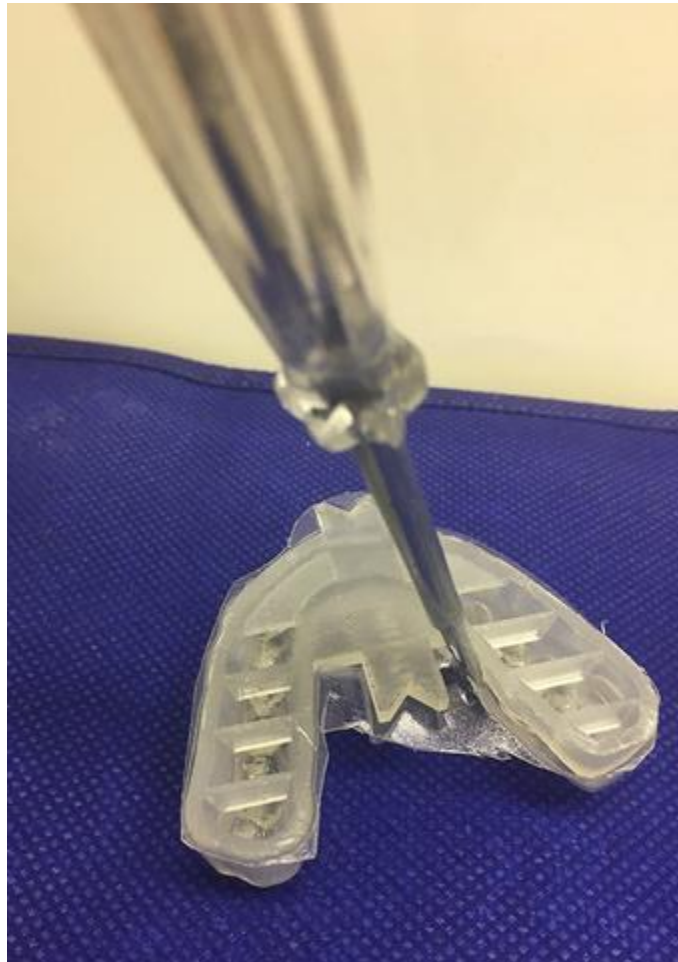
Step 1. Thermoform Zendura sheet over dental model.



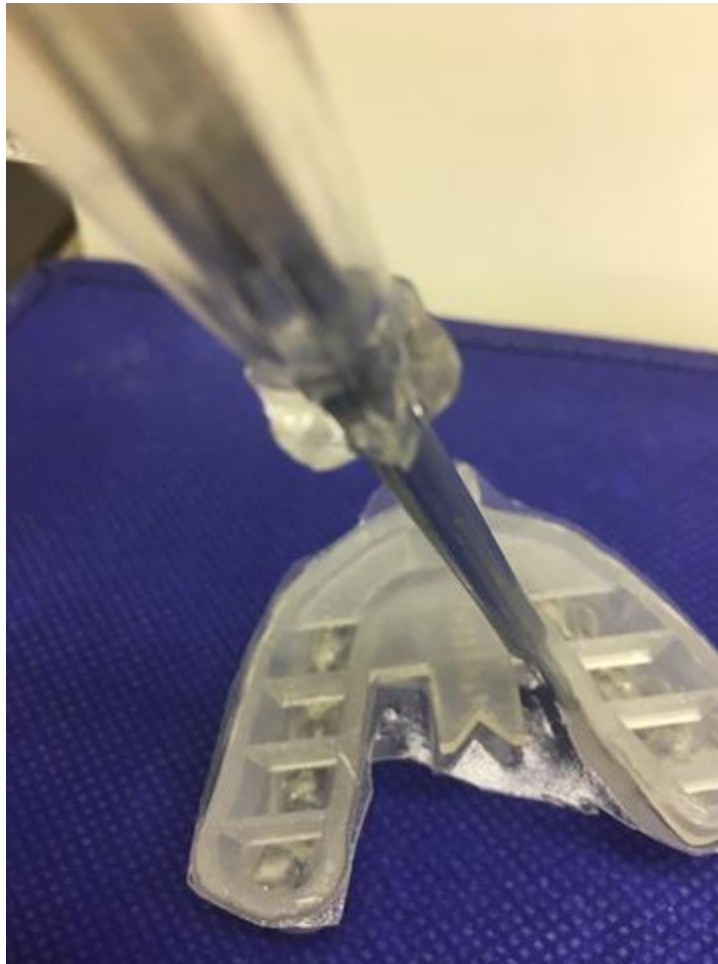
Step 2: Using larger pair of non-stick Titanium or Teflon coated scissors, make initial cutline to remove excess material surrounding dental model. (Look on Amazon.com for non-stick Titanium or Teflon coated scissors for cutting cardboard and heavier materials.)



Step 3. Turn formed sheet and dental upside down and insert small straight screwdriver where shown (on lingual side).



Step 4. Slightly twist the screwdriver to break the aligner loose from the model, as shown below.



Step 5: Push screwdriver tip further into opening between formed sheet and model.

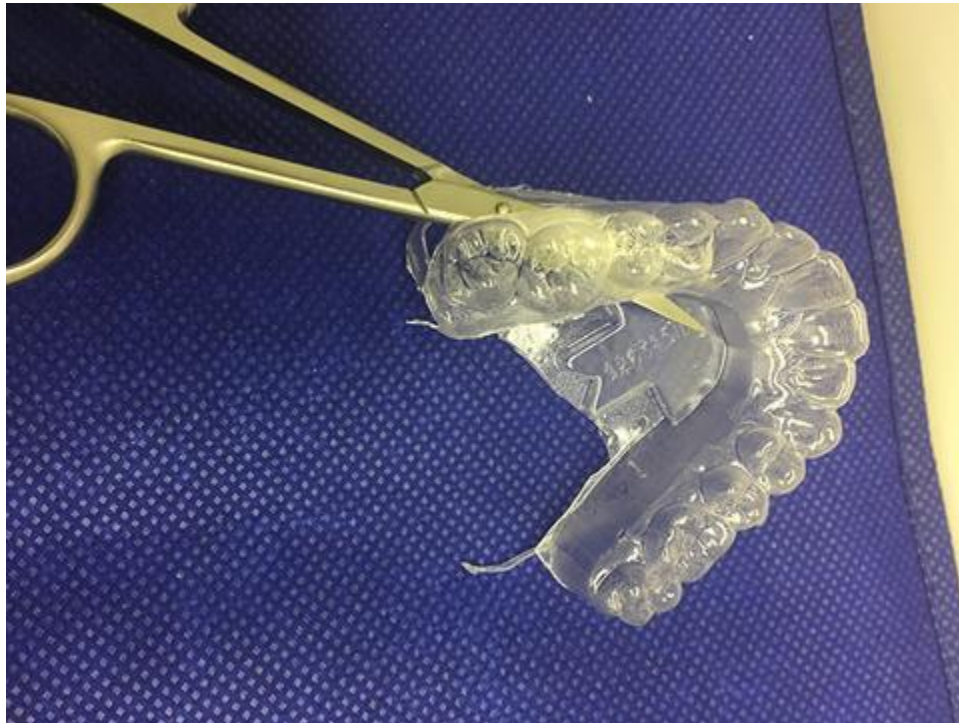


Step 6. Remove aligner from model.

Note: If you have trouble removing the aligner from the formed sheet, some lab techs make cut a small 2-4mm V behind the last molar.



Step 7. Using a small curved pair of high-quality crown-and-bridge scissors (or similar scissors), cut away excess material from aligner, cutting about 1cm to 1.2cm below the gingiva line.



Step 10. Make final cutline.

Note: On doing a straight vs scalloped cutline, we strongly recommend a fairly straight cutline to preserve the strength and durability of the plastic at the cutline. It's very important to have the material at the gingival margin as thick as possible all along the margin. For aligners that means maximum teeth movement force along that area, and for retainers better teeth retention.

Step 10. Using rotary tool with a polishing wheel, smooth cut edges of aligner to a smooth surface using first a coarse grit and then a medium grit polishing wheel.



Step 10. Rinse Zendura appliance with cool water and mild soap before delivering.

ANOTHER TECHNIQUE FOR CUTTING, TRIMMING AND FINISHING

Some of our customers prefer using a rotary tool for cutting, trimming and polishing their Zendura appliances. The following illustrates the basic procedure and tools they use.

Step 1. Use a rotary trimming wheel or a twist drill (1mm diameter for Zendura material) at about 35,000 rpm to make a cut line about 15mm - 10mm below the gingiva. Then remove the excess material.



Step 2. Remove dental model from the appliance.

Step 3. Trim off extra parts with crown & bridge scissors or trimming burs.



Step 4. Use rotary tool with a polishing wheel at about 10,000 rpm to smooth the rough edges of the Zendura appliance.



Step 5. Rinse Zendura appliance with cool water and mild soap before delivering.

A video demonstration of this technique:



Also see [Thermoforming Tips](#)

- Erkogum Blocking Out Materials (Glide Laboratories Item#:70-1090-ERK0006)
- Perfecta Block-Out Resin (Henry Schein Item#: 4008300)
- Liquid Foil Separator (GreatLakes Orthodontics Item#: 175-034)
- [Trimming Wheel](#). (EZ Lock Mandrel & Metal Cutting Wheels for Rotary Tools)
- [Twist Drill](#) (Komet USA Pg 35, Item#: H219 104 023)
- Trimming Bur (Dentsply International Item#: 18979W)
- Large Pair of Non-stick Titanium or Teflon Coated Scissors (variety of options available on Amazon.com)
- [Crown & Bridge Scissors](#) (available from Beck Instruments at www.beckinstruments.com, EA Beck #500-215 or EA Beck #500-207 for smaller fingers)
- [Polishing Brushes](#) (<https://www.amazon.com/dp/B010AHSB5S>)