

## Tips from practicing dentists on using products to the best advantage

### Product Category BURS, ALL TYPES

**Dentist:** Jason H. Goodchild, DMD

**Practice location:** Plymouth Meeting, PA

**Type of practice:** General Practice

**Years in practice:** 21

#### System/product to be

**described:** Two Striper diamond burs

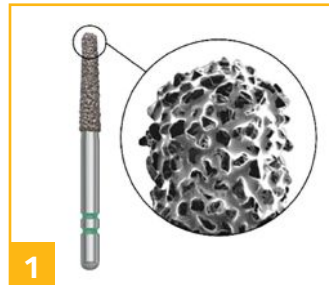
**Manufacturer:** Abrasive Technology Inc. Distributed By Premier Dental Products Company

**Company Website:** [www.premierdentalco.com](http://www.premierdentalco.com)

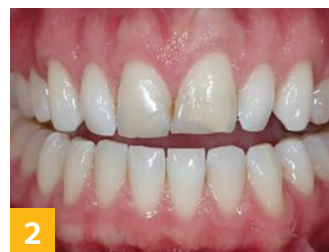
#### Description of this product and its benefits to the dental patient:

A positive crown and bridge outcome is the result of properly completing several essential steps. Arguably, the most vital step is the preparation of the tooth. This can affect the ease and success of tissue management, impression-making, provisionalization, and final cementation steps. Typically, the cutting tools used for tooth preparation are diamond burs, but clinicians must be aware that all diamond burs are not the same.

Two Striper diamond burs (Abrasive Technology) (Figure 1) are designed to provide value by lasting a long time and delivering fast, cool cutting. This means use of fewer burs, less chair time, and a better patient experience. Other diamond burs electroplate the diamond crystals onto the shank, while Two Striper uses a brazing process to bond natural diamond crystals. This bonding process maximizes the exposure of diamond-cutting surfaces, especially at the tips and upper circumference of the bur where most cutting occurs. The result is diamond crystals, placed



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evenly and precisely in a uniform matrix, that are fused permanently to a surgical-grade stainless steel shank. Clinically, this translates into efficient, precise cutting potential that remains effective over multiple uses.

Two Striper diamond burs are available in more than 300 unique shapes and several grit choices. Clinicians can select an appropriate diamond bur for any preparation style or clinical situation.

#### Step-by-step description of how this product is used with a patient:

A 25-year-old patient sought treatment, saying he disliked the appearance of his maxillary central incisors. And intraoral examination revealed multiple resin restorations placed after the area was traumatized during childhood. A treatment plan was formulated to include full-coverage lithium silicate restorations on teeth nos. 8 and 9.



4

**Figure 1:** Close-up view of Two Striper diamond bur (Abrasive Technology) illustrating the incorporation of natural diamond crystals via the proprietary brazing process.

**Figure 2:** Preoperative buccal retracted view of 25-year-old man whose treatment plan involved full-coverage lithium silicate restorations on teeth nos. 8 and 9.

**Figure 3:** Final preparation of teeth nos. 8 and 9 using Two Striper diamond burs (Abrasive Technology) on 25-year-old man.

**Figure 4:** Buccal retracted view of teeth nos. 8 and 9 after final cementation of lithium silicate crowns with self-adhesive resin cement.

circumferential reduction and produce a slightly subgingival butt joint finish line. The Two Striper FG #722.8 KR bur (2015360 Coarse/2015658 Fine) features a beveled edge to help create rounded internal line angles.

After using coarse diamonds to achieve the basic preparation shape and geometry, Two Striper fine-grit football (no. 283.4F) and flat-ended tapered (703.8F KR) burs were used for final smoothing and rounding. In addition, the finish line was refined to create a distinct cavosurface with smooth edges that helped optimize margin reproduction and fabrication of final restorations. Care was taken to not traumatize the marginal gingiva; however, to arrest any bleeding Hemodent (Premier Dental) was applied on a cotton pledget.

Using a full-arch stock tray, the final impression was obtained with polyvinyl siloxane impression material. After inspecting the impression to verify capture of the prepared tooth details, provisional restorations were fabricated with Integrity Multi-Cure Temporary Crown and Bridge Material (Dentsply Sirona) and cemented with NexTemp Temporary Cement (Premier Dental).

Three weeks later, the final restorations on teeth nos. 8 and 9 were cemented with Calibra Universal Self-Adhesive Resin Cement translucent shade (Dentsply Sirona). Figure 4 shows the completed restorations after cementation.

Buccal and palatal anesthesia was initiated with 4% articaine (Orabloc) with epinephrine 1:100,000 (Pierrrel Pharma). The preparations were completed using Two Striper diamond burs to achieve 2 millimeters of incisal clearance and 1.0 to 1.5 mm of circumferential clearance. A flame-shaped diamond (no. 260.8C) was used to break interproximal contact followed by use of a football-shaped diamond to create the incisal reduction (no. 283.4C). A flat-ended tapered bur (no. 703.8C KR) was used to accomplish