

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

### Product Category HANDPIECES

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

**Practice location:** Plymouth Meeting, PA

**Type of practice:** General Dentistry

**Years in practice:** 21

**System/product to be described:** AeroPro Cordless Prophylaxis Handpiece System

**Manufacturer:** Premier Dental Products Company

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

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

The practice of dentistry by all members of the clinical team involves static posture, precise and repetitive motions, long work hours, and ergonomic challenges. These factors contribute to a prevalence of musculoskeletal disorders (MSDs) among dentists and dental hygienists ranging from 64% through 93%, with prolonged static postures and repetitive movements listed as the key risk factors.<sup>1,2</sup> More concerning, dental hygienists seem to be at disproportionate risk of developing MSDs compared with dentists; 1 studied found that 67% of dentists and 86% of dental hygienists reported MSD pain.<sup>3</sup> Focusing on hand and wrist pain, the same study reported a higher prevalence of hand pain in hygienists than in dentists, 75% and 38%, respectively.

Technology has helped provide solutions for dental hygienists, specifically by the introduction of larger handled instruments

**Figure 1:** AeroPro Cordless Prophylaxis Handpiece System (Premier Dental Products Company).  
**Figure 2:** The components of the AeroPro Cordless Prophylaxis Handpiece System (Premier Dental Products Company). From left to right: 2pro Disposable Prophylaxis Angle, outer sheath, disposable polyurethane barrier, and motor component.  
**Figure 3:** Hygienist using the AeroPro Cordless Prophylaxis Handpiece and 2pro Disposable Prophylaxis Angle (Premier Dental Products Company) to complete a coronal polishing procedure after dental prophylaxis.  
**Figure 4:** Close-up of the AeroPro Cordless Prophylaxis Handpiece and 2pro Disposable Prophylaxis Angle (Premier Dental Products Company) being used to complete a coronal polishing procedure.



and ultrasonic inserts, which have more effective tips for better control and precision. However, prophylaxis handpieces have historically been air-driven and decidedly unergonomic with tubing connected to a slow speed motor and straight nose cone. This delivery system can be heavy and create chronic fatigue to the upper extremities, hands, and wrists.

Based on input from dental professionals, Premier Dental Products Company recently introduced the AeroPro Cordless Prophylaxis Handpiece System. The AeroPro system was engineered to provide clinicians with greater mobility, choice, and control, helping prevent hand and wrist fatigue symptoms and providing a better polishing experience for both clinicians and patients.

AeroPro is compatible with most disposable prophylaxis angles, and the angle can be

rotated 360° for improved intraoral access. According to Premier's Web site, AeroPro is "ergonomic and lightweight with a well-balanced design, featuring a textured grip to help reduce pinch strength and hand fatigue." It is controlled using a single button, allowing the operator to easily access the appropriate prophylaxis cup speed for the procedure. AeroPro's speeds range from 500 through 2,800 revolutions per minute.

AeroPro is equipped with ChargeSMART Battery Technology. The induction charging system powers AeroPro's battery quickly and safely and ensures a long-lasting charge that lasts through the work day.

AeroPro is Centers for Disease Control and Prevention-compliant and has an infection prevention protocol. The motor component is isolated by a custom-fit disposable polyurethane barrier and covered by

a durable, metal outer sheath. After use, the metal sheath can be removed, rinsed, and autoclaved, while the motor component is disinfected.

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

Coronal polishing is routinely completed after dental prophylaxis, despite recommendations that it should only be performed when extrinsic stain is present. It usually is the final step of the hygiene appointment, and it is intended to help achieve a smooth, mirrorlike enamel surface that is characterized as having a high luster. In this case, the hygienist completed the coronal polishing by using the AeroPro Cordless Handpiece System, a 2pro Disposable Prophylaxis Angle, and medium grit, mint flavor, Enamel Pro Prophylaxis Paste (Premier Dental Products Company).