

KD90369

510(k) SUMMARY

ProDrive Line of Dental Handpieces ProDrive Systems Inc.

FEB 2 7 2009

Owned by:

ProDrive Systems Inc. 812 Commerce Drive Ogdensburg, NY 13669 USA

Contact Person:

Timothy F. Nason, PhD Director of Regulatory Affairs ProDrive Systems Inc. 812 Commerce Drive Ogdensburg, NY 13669 USA

Date of Summary:

January 9, 2009

Device Name:

Proprietary Name:

ProDrive Line of Dental Handpieces

Common Name:

dental handpiece

Classification Name:

Handpiece, Air-powered, Dental

Product Code:

EFB ("Dental handpiece and

accessories", 21CFR 872.4200)

Predicate Device:

Proprietary Name:

T1 LINE Dental Handpieces

510(k) Number:

K972436

Product Code:

EFB



Description of Device:

The ProDrive line of high-speed air-driven dental handpieces includes two models – the ProDrive Mini and ProDrive Standard. These models are each available with one of a variety of quick couplings for use with: Sirona, KaVo, W&H, Bien-Alr, NSK Mach and NSK QD-J connections. In addition, the PD Standard model comes in a fixed coupling format for MidWest handpiece users.

The handpieces come supplied with a halogen light source of approximately 25,000 lux and a 3 jet spray for water. Every ProDrive handpiece is equipped with the previously-cleared ProDrive turbine as the standard drive mechanism.

The ProDrive turbine is appropriate for use with ProDrive carbide and diamond cutting instruments. A push-button spindle mechanism is used to grip the shanks of the cutting instruments. The unique geometry of the bur shank and turbine spindle securely locks the bur in the turbine eliminating the slipping that can occur over time with traditional burs and turbines. In addition to improved performance and durability, the secure locking mechanism enhances the safety of the ProDrive Replacement Turbine by reducing the risk of accidental disengagement of burs from the handpiece during operation.

In addition, the ProDrive system incorporates the ability to index the bur to a second, extended, position effectively improving on the visibility angle and the utility of the handpiece without adversely affecting its performance.

The ProDrive line of dental handpieces meets or exceeds all of the applicable performances standards outlined in ISO 7785-1:1997(E). Extensive testing indicates that after 250 sterilization/use cycles the ProDrive handpiece continues to meet all performance requirements.

Intended Use of Device:

The ProDrive Line of Dental Handpieces is intended for use by authorized persons in the practice of dentistry. The intended use of the ProDrive Line of Dental Handpieces is identical to that of the Predicate Device.



Comparison of Technological Characteristics to Predicate Device:

The following table compares the features of the ProDrive Line of Dental Handpieces to the Predicate Device:

Table 1: Substantial Equivalence Table

TECHNOLOGICAL CHARACTERISTIC	COMPARISON TO PREDICATE	
intended use	idențical	
Indications for use	identical	
Target population	ldentical	
Anatomical sites	Identical	
Where used	Identical	
Energy used and/or delivered	Similar	
Human factors	Similar	
Design	Similar	
Performance	Similar	
Standards met	Identical	
Materials	Similar	
Biocompatibility	Identical	
Compatibility with environment and other devices	Identical	
Sterility	Identical	
Electrical safety	Identical	
Mechanical safety	Identical	
Chemical Safety	Identical	
Thermal safety	ldenfical	
Radiation safety	Identical	

Conclusions Drawn from Technical Comparison:

The ProDrive Line of Dental handpieces is essentially the same as the predicate device in terms of its intended use, operating principles and materials.

The ProDrive Line of Dental handpieces conforms to the ISO 7785-1:1997(E) standard and the FDA Guidance Document on Dental Handpieces.

Therefore, we conclude that the ProDrive Line of Dental handpieces is both safe and effective for its intended use.



APR 23 2009

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

ProDrive Systems, Incorporated C/O Mr. Mark Job Responsible Third Party Official Regulatory Technology Services, LLC 1394 25th Street NW Buffalo, Minnesota 55313

Re: K090369

Trade/Device Name: The ProDrive Line of Dental Handpieces

Regulation Number: 21 CFR 872.4200

Regulation Name: Dental Handpiece and Accessories

Regulatory Class: I Product Code: EFB

Dated: February 12, 2009 Received: February 13, 2009

Dear Mr. Job:

This letter corrects our substantially equivalent letter of February 27, 2009.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal</u> Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please contact the CDRH/Office of Surveillance and Biometrics/Division of Postmarket Surveillance at 240-276-3464. For more information regarding the reporting of adverse events, please go to http://www.fda.gov/cdrh/mdr/.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Susan Runner, D.D.S., MA

Acting Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Indications for Use

The ProDrive Line of Dental Handpieces

To be used in the dental operatory to prepare dental

510(k) Number (if known): Not yet assigned

Device Name:

Indications For Use:

	cavities for restorational cleaning teeth.	tions such as fillings,	and for
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Prescription Use X (Part 21 CFR 801 Subpart D)	AND/OR	Over-The-Counte (21 CFR 801 S	r Use
(Fait 2) City do i Subpart b)		(21 OFR 001 C	oubpart O)
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Division of Anes	sthesiology, General H	ospital	
Infection Contro	ol, Dental Devices	, .	
510(k) Number	1090369	· .	