ENDO-EZE®

FIND™

APEX LOCATOR

UNSURPASSED ACCURACY
UNRIVALED RELIABILITY[1]

1. Data on file.

ENDO-EZE®

FIND™

APEX LOCATOR

- Unsurpassed accuracy[1] with convenient, easy-to-read display
- Fully automatic multifrequency measurements
- Compact design with small footprint fits easily on a counter or treatment tray

1. Data on file.

ESTABLISHING WORKING LENGTH

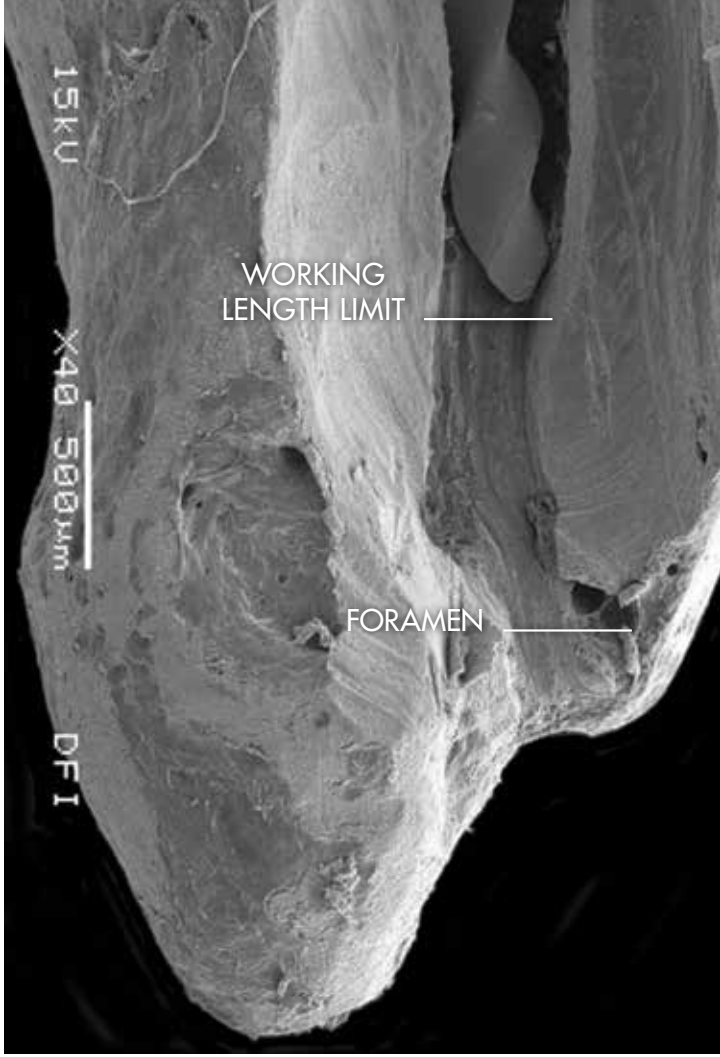
Clinical research shows that establishing the correct working length is critical for success in root canal therapy. Using an apex locator in combination with radiographic measurements can significantly increase your success rate in the endodontic treatments you provide.

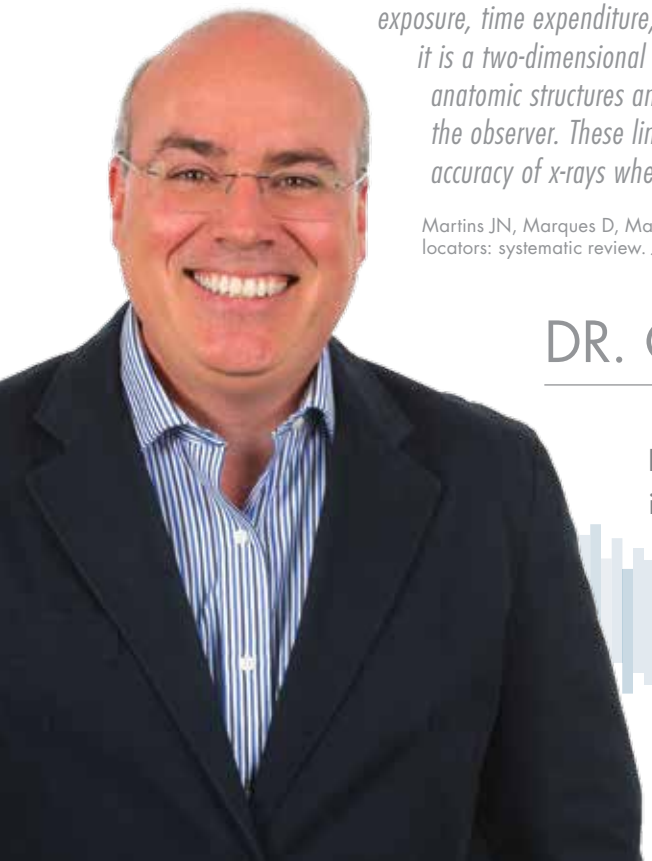
"Underestimation of the WL [Working Length] can lead to insufficient debridement of the root canal, whereas overestimation can result in damage to the periapical tissues, which will delay or prevent healing. . . . Furthermore, radiographs provide a two-dimensional image of a three-dimensional structure, which might affect the interpretation."

Stöber EK, Duran-Sindreu F, Mercadé M, Vera J, Bueno R, Roig M. An evaluation of root ZX and iPex apex locators: an in vivo study. J Endod. 2011;37(5):608-10.

"Traditionally, radiography has been the most used method in obtaining information on the anatomy of the root canal and its surrounding tissues. However, the working length measurement performed radiographically presents several limitations, namely radiation exposure, time expenditure, and difficulty of interpretation because it is a two-dimensional image that is often overlapped with anatomic structures and is subject to the interpretation of the observer. These limitations contribute to the low 25-40% accuracy of x-rays when locating the apical foramen."

Martins JN, Marques D, Mata A, Caramês J. Clinical efficacy of electronic apex locators: systematic review. J Endod. 2014;40(6):759-777.





DR. CARLOS RAMOS

Dr. Carlos Ramos graduated in dentistry in 1987 from the State University of Londrina in Brazil. In 1990 he received the title of endodontics specialist from the University of São Paulo, and in 1993 he received his master's degree in endodontics from the same university after presenting a dissertation on the accuracy of apex locators in vitro. He then began the PhD program in endodontics, completing it in 1997. He was granted two international patents as the inventor of a system for asymmetric reciprocating movement and an electronic working length method called Radicular Spectral Attenuation Coefficient, both of which have brought different devices to the world marketplace that use these patented technologies.

OVERVIEW

Endo-Eze® FIND™ is a battery-operated portable device designed for apex localization and working length determination during root canal treatments. Using a multifrequency-dependent impedance method and a series of proprietary algorithms, FIND accurately determines the position of the apical foramen.

Utilizing the advantages of its well-proven, patented technology, Endo-Eze FIND offers the clinician unsurpassed accuracy, unrivaled reliability, and an extremely user-friendly interface. The custom color graphic display of the unit helps clinicians achieve the optimal endodontic performance required during every root canal treatment.

Power button
Unit turns off after minutes without use

Volume button
Four levels: mute, low, normal, and high

Signal strength

Movement of file

Median third, beginning of the apical third, and mid-apical third shown in blue

Current file position

Complete circuit

Cable connected

Device volume

Apical foramen indicator

File tip has progressed beyond the foramen into the periapical region

Measuring cable port

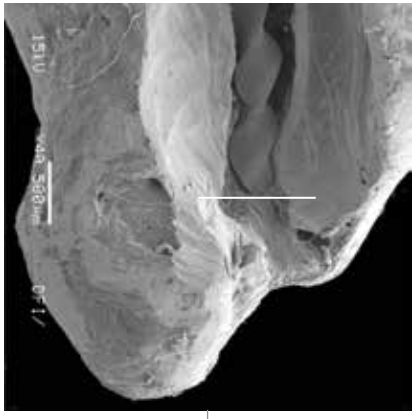
Low battery indicator

Device cradle

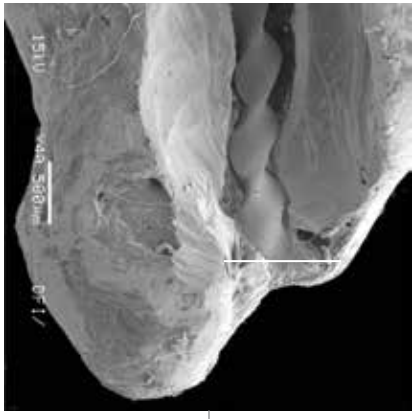
THE EFFECTS OF OVERINSTRUMENTATION

Research has shown that instrumentation beyond the apical foramen is a widespread problem, occurring in over half (51%) of the premolars and nearly a quarter (22%) of the molars evaluated in a recent study.[1] When a file perforates the apical foramen and enters the periapical tissues, pain and swelling can result, causing emergency appointments and additional costs for you and the patient. Endo-Eze FIND helps you avoid overinstrumentation by providing accurate and reliable measurements to notify you when you've reached the ideal working length.

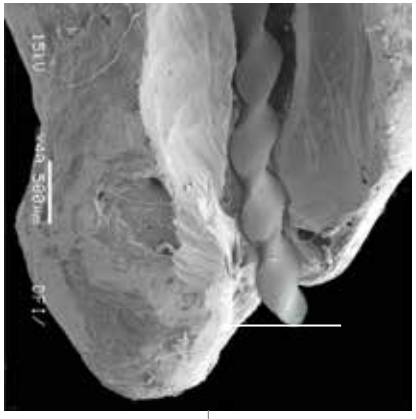
FILE 0.5mm SHORT OF FORAMEN

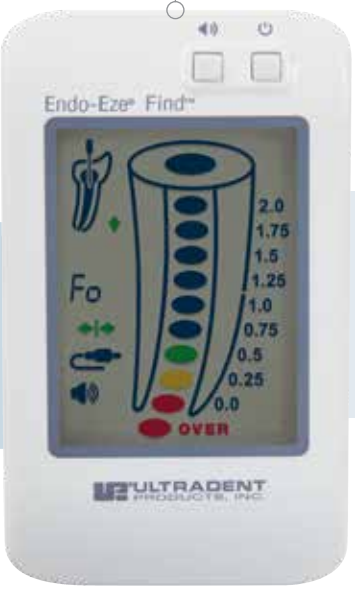


FILE AT FORAMEN



FILE OVER FORAMEN





1. ElAyouti A, Weiger R, Löst C. Frequency of overinstrumentation with an acceptable radiographic working length. *J Endod.* 2001;27(1):49-52.

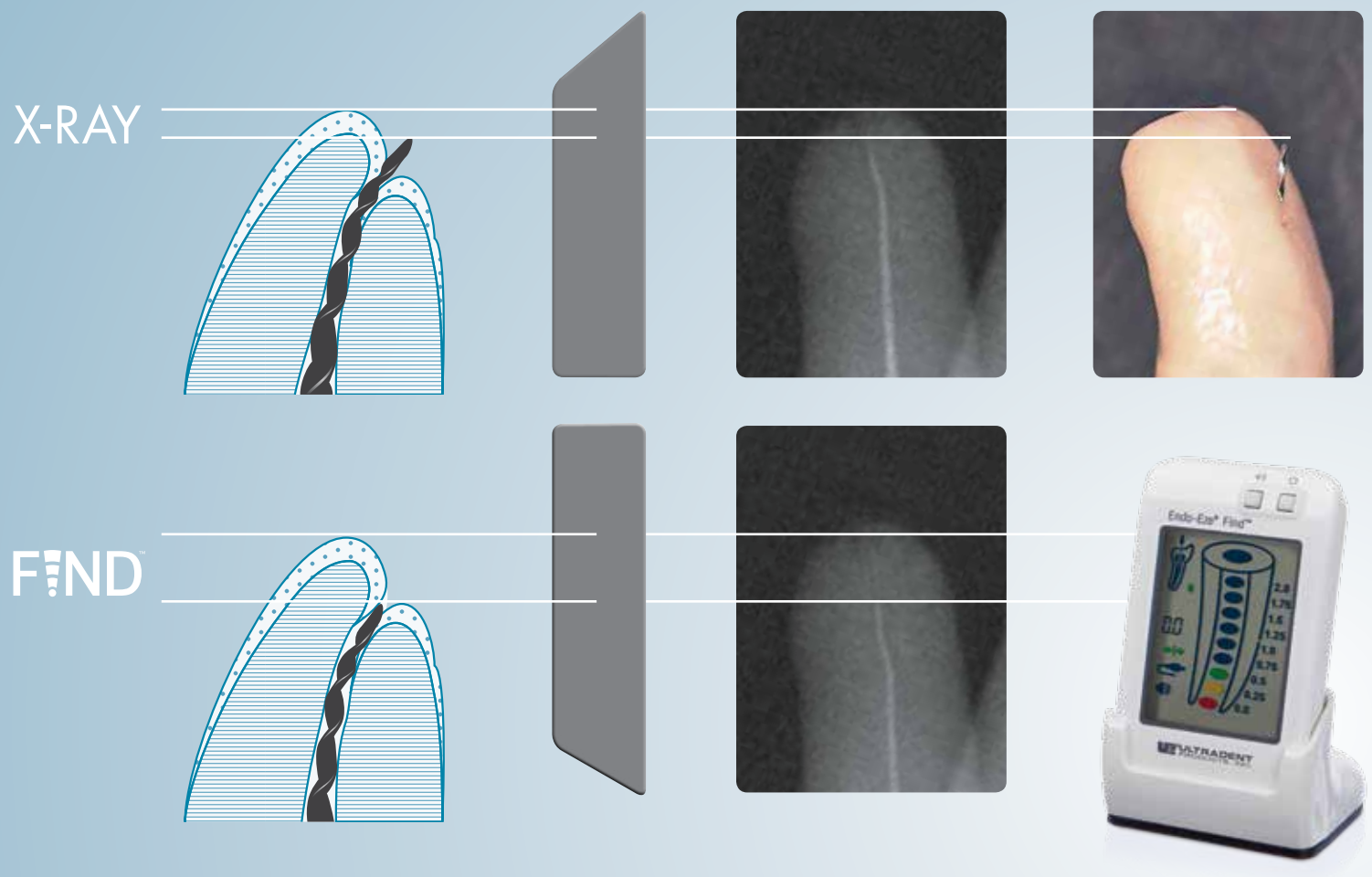
X-RAY VS. FIND

The success of any root canal treatment depends on accuracy. The most widely used method for determining the apical limit is the radiograph, but, unfortunately, it's not the most accurate. If the film isn't positioned exactly, if the angle of the x-ray beam isn't precise, or if there are interferences from equipment or anatomical structures, the reliability of the radiograph suffers.

Not to mention that the location of the apical foramen is not always the same as the radiographical apex to begin with.

By sending an electronic signal all the way to the tip of the file, the FIND apex locator lets you know when you've reached the apical foramen, eliminating the risk of overinstrumentation beyond the apex into the periapical tissues.

A study published in the Journal of Endodontics[1] evaluating 338 radiographs showed the file extending past the foramen—even when the radiograph showed it short of or at the foramen—an average of 24.5% of the time.



1. 1. ElAyouti A, Weiger R, Löst C. Frequency of overinstrumentation with an acceptable radiographic working length. J Endod. 2001;27(1):49-52.

PRODUCTS AND ACCESSORIES

3362 Endo-Eze FIND Apex Locator Kit

1 x FIND unit
1 x Cradle
1 x Touch probe
1 x Measuring cable
2 x File clips
5 x Lip clips

3364 Touch Probe

2 x Touch probes

3365 Measuring Cable

1 x Measuring cable

3363 File Clips

2 x File clips

3368 Lip Clips

5 x Lip clips

ENDO-EZE®

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