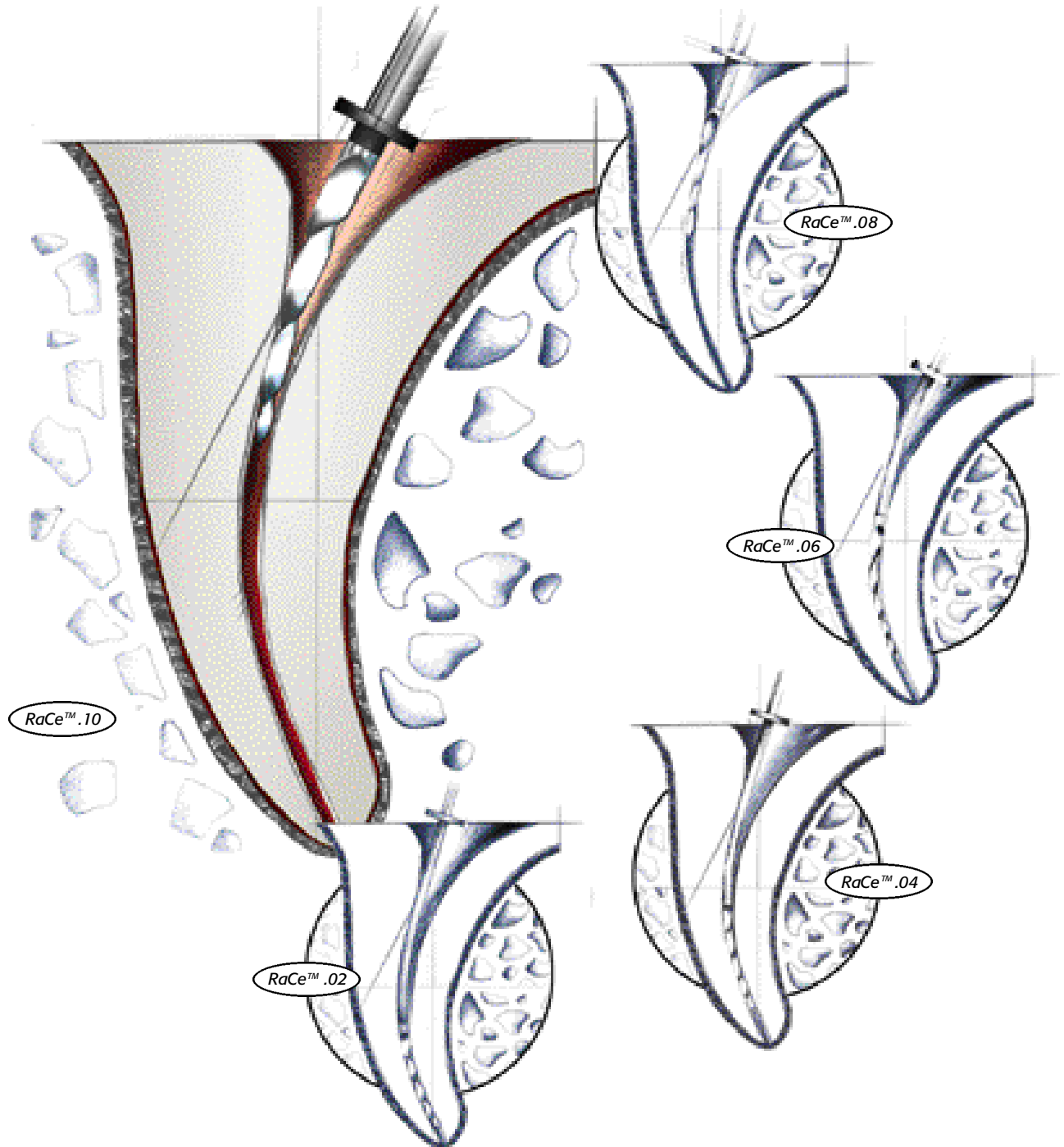


Systems for Endodontic Excellence



***RaCe™ Rotary Endodontic System
with Safety Memo Disc***

Buy Direct. Buy Brasseler USA.

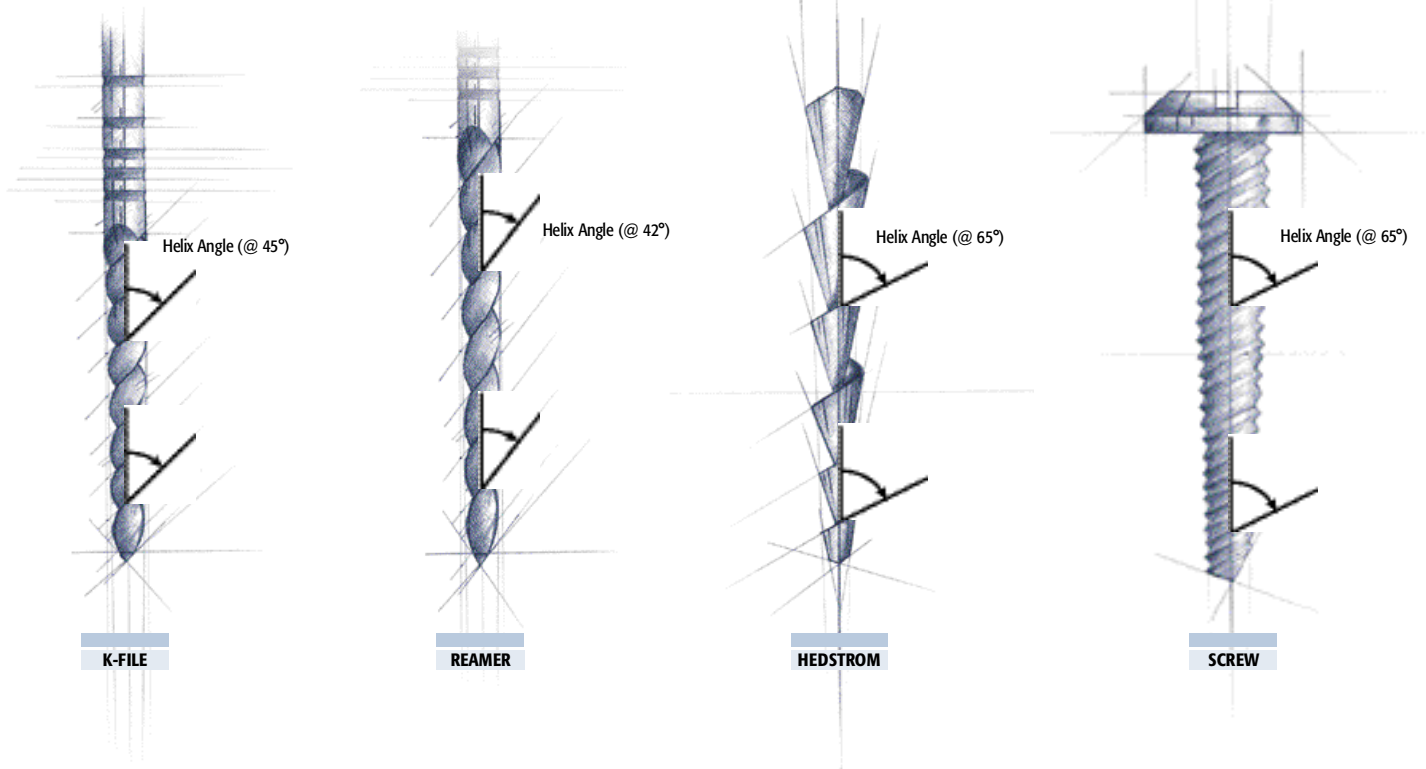


Overview of Current Situation

Problem: Using a hand-file design in rotary endodontics

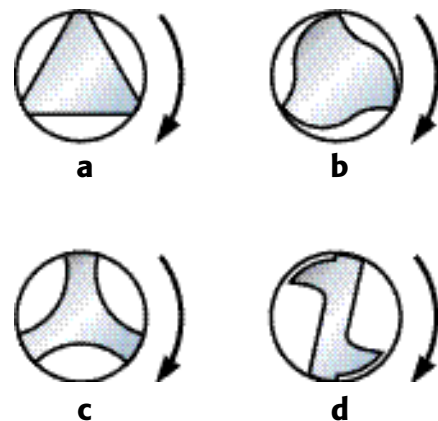
The use of rotary instrumentation in endodontics significantly reduces the amount of chair time typically associated with a root canal. This not only reduces patient anxiety, but also helps eliminate fatigue and stress for the dentist. In addition, rotary instrumentation reduces injuries to the hand and wrist associated with repetitive hand motion. Obturation is enhanced by rotary instrumentation since these instruments leave a smoother more conically shaped canal. It is easy to see why the use of flexible nickel titanium rotary instrumentation has greatly increased among dentists. In spite of excellent

results, file failure has remained a too frequent and frustrating occurrence. Most conventional rotary instruments utilize a design similar to standard hand files. This hand file design was engineered to be used longitudinally with a quarter turn and pull motion – dramatically different from the continuous rotation produced by a low speed handpiece. When this hand file design is used with continuous rotation, the instrument “self-threads” or screws into the canal due to the consistent or progressing helix angles of the file. The result is binding, torque spiking and separation.



Compromised design to minimize self-threading

In an attempt to overcome these fundamental flaws in file design, various manufacturers created different methods to modify the basic file design. One approach was to dull and mute cutting angles. (fig. a & b) Another method was to introduce concentric indicators on the cutting edges or rounding of the cutting edges. (fig. c & d) Though these designs may reduce the self-threading effect, they fail to eliminate problems associated with the fundamental design flaw. Files continue to thread, bind and separate even with these designs. In fact, these designs reduce the cutting efficiency of the instruments by muting or dulling the cutting edges and actually increase the need for working torque, while the self-threading problem remains. Unfortunately, this increased need for torque significantly increases the likelihood of breakage.



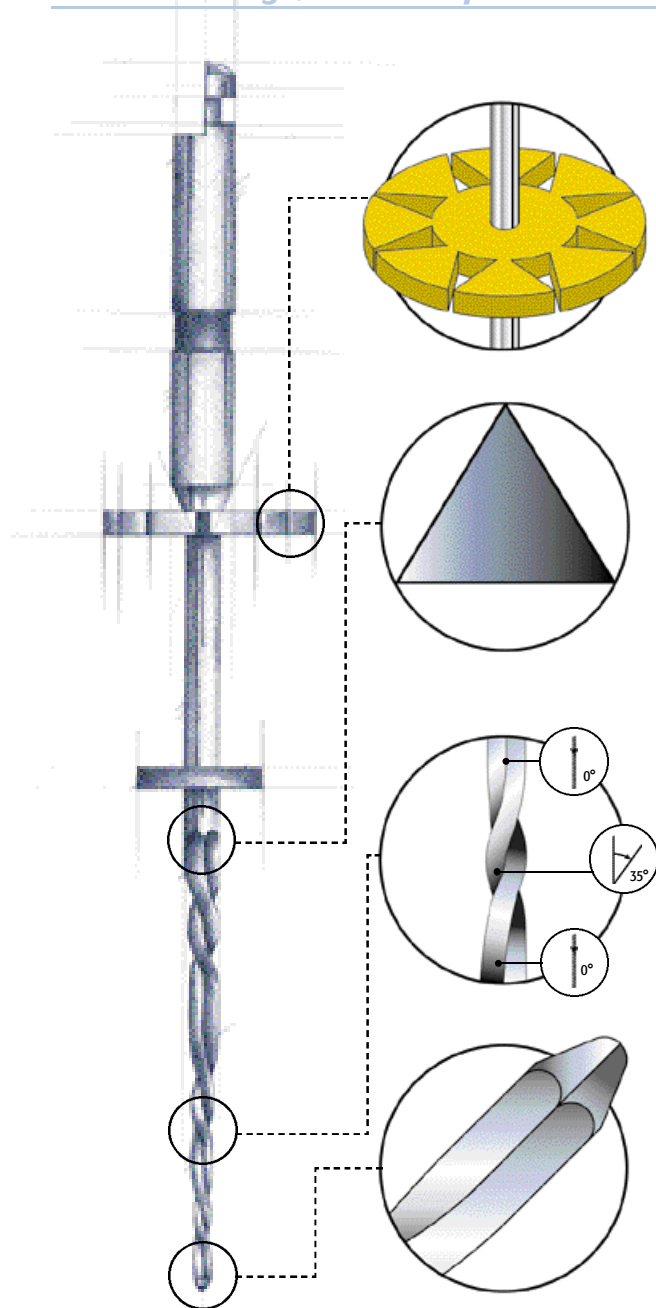
Introducing RaCe™ (Rotary Alternating Cutting Edge Technology)

The revolutionary new rotary file specifically designed for rotary endodontics.

The new Brasseler USA RaCe™ design features one set of sharp cutting edges that alternate with a second set pitched at a different angle—two superior cutting edges in one rotary file. The helix angles of the instrument change automatically to constantly cut and remove debris from the canal walls. The result is a rotary endodontic file with the lowest working torque on the market, optimum operator control, reduced risk of metal fatigue and improved resistance to instrument separation. The RaCe™ system further reduces torque requirements and technique sensitivity by limiting the

working length to only eight millimeters. The instruments are available in progressive .10, .08, .06, .04 and .02 tapers. When used sequentially, the RaCe™ system will eliminate torque spiking caused by files re-engaging previously instrumented canal walls. The instruments also feature a unique spade-shaped safety tip, which enables the file to track the canal and break through calcification while minimizing ledging and transportation. Totally new, the RaCe™ system will help enhance your endodontic techniques.

Advanced design, enhanced performance



Safety Memo Disc

- Quantifies usage and stress to minimize overuse and metal fatigue
- Identifies file taper
- Eight removable petals

Triangular Cross-Section and Chemical Polishing

- Sharper instrument for optimum cutting efficiency
- Requires less torque
- Reduces breakage by eliminating micro-scarring of the instruments
- Provides a smooth, sharp & more durable cutting edge

RaCe™ (Rotary Alternating Cutting Edge) Design – The Rotary Revolution

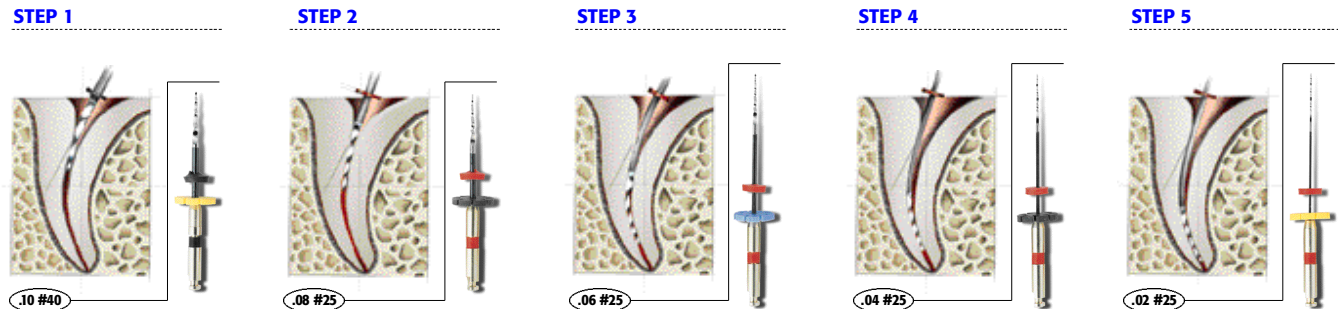
- The alternating cutting edges of the file constantly switch the helix angles of the blades as they rotate inside the canal
- Reduces working torque significantly – up to 75%
- Nickel Titanium – for strength, flexibility and sharper cutting edges
- Reduced cutting length further reduces torque demands
- Reduces self-threading
- Helps guard against binding, grabbing and file failure
- Facilitates debris removal

Safety Tip

- Unique spade shape ensures excellent centering in the canal
- Decreases risk of deviation and ledging

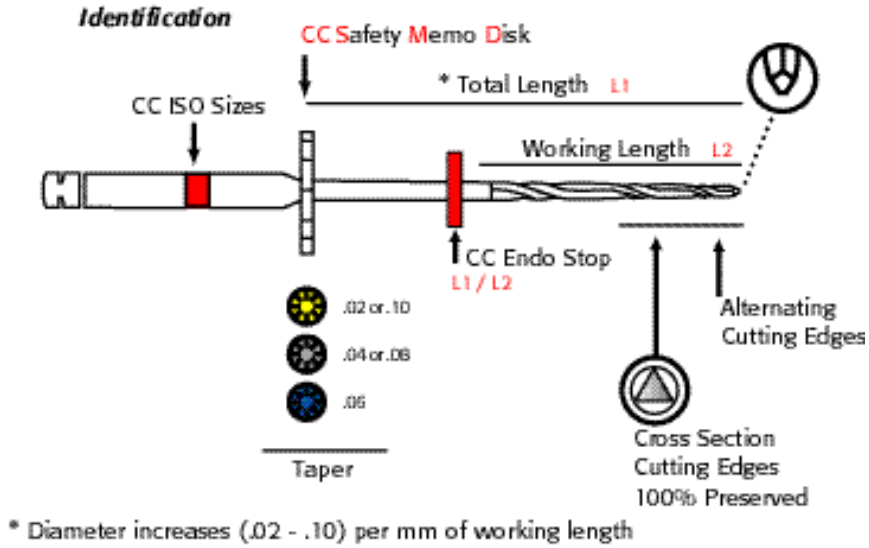
The RaCe™ Sequence: Fast, Simple & Safe

The RaCe™ sequence is optimal when used in the prescribed crown down technique. However, because of its superior design, it can also be utilized with a step back technique. The steps in the RaCe™ sequence are so simple that we have reduced the instrumentation to five RaCe™ files as shown below.

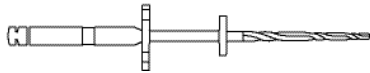


The RaCe™ Technique 5 revolutionary new instruments, 7 keys to success

1. Access tooth and provide straight line access and visibility of canal opening(s). Use a #10 or #15 K-file to identify patency. Combine x-ray and canal exploration to determine canal shape and complexity.
2. Utilize a contra-angle handpiece with an adjustable working speed between 300 to 600 rpm. Handpieces featuring adjustable torque add additional security. Since self-threading is not a common occurrence with RaCe™ instruments, any conventional handpiece with adjustable speed is adequate.
3. Gentle apical pressure – determine correct apical pressure by hand. Take an .02 #25 RaCe™ file by hand, gently pressing it into contact with a flat smooth surface at 45 degrees until the instrument begins to bend. This is the ideal working apical pressure to utilize with the RaCe™ files.
4. Progression – apply apical pressure to advance the instrument one millimeter; retract slightly, then proceed with equal pressure. The RaCe™ safety tip ensures centering in the canal. Do not force the instrument if it does not advance. Recapitulate manually, then return to the last RaCe™ instrument used.
5. Working Time – Avoid prolonged stationary rotation in a curved canal. Limit working time to five to ten seconds per instrument. In the event of a clacking of the instrument, reduce apical pressure. Allow the RaCe™ instrument to work at its own speed.
6. Irrigate/lubricate liberally to remove debris.
7. Metal fatigue avoidance – minimize metal fatigue with the use of the SMD disc and test table per instructions. The SMD disc individually records each instrument's use and stress. Disregard when indicated.



New



Packaging unit	5	-	5	-	5	5
Color code	○	●	●	●	●	●
Size	D Ø ¹ / ₁₀₀ mm	015	025	035	040	
L ¹ = 19	L ² = 8mm	.10 Taper 270		-	-	700G
L ¹ = 19	L ² = 8mm	.08 Taper 270		-	700F	-
L ¹ = 25	L ² = 8mm	.06 Taper 270		-	700E	-
L ¹ = 25	L ² = 8mm	.04 Taper 270		-	700D	-
L ¹ = 25	L ² = 16mm - 8mm - 16mm	.02 Taper 270		700H	700C	700I
Assortment				700B		

RaCe™ - Nickel titanium rotary file
Assortment contains one each of the following: 700C, 700D, 700E, 700F, 700G



RaCe™ 328.21.808

Developed by Brasseler USA

One each of the following: size #40 / .10 taper, #25 / .08 taper, #25 / .06 taper, #25 / .04 taper and #25 / .02 taper

*Technique video available with order

Safety Memo Disc

Follow the SMD metal fatigue test table.

When superimposing the x-ray and the SMD gauge, look for the smallest radius in the canal. Based upon the obtained value, the canal will be classified simple, medium, or difficult.

The adjacent SMD tables act as a guide to the number of petals needed for treatment. As the instrument limit is approached, minimize the risk of fatigue and select a new instrument.

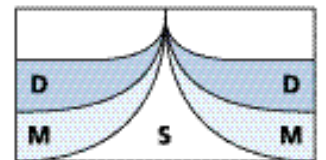
• **SMD** gauge on X-Ray radiography

3 Categories **S** = Simple
M = Middle
D = Difficult

One petal or more depending on table values.

	S	M	D
Taper 2%	1	3	6
N° 40	2	4	7
N° 35	3	5	8
N° 25	4	6	9
N° 15	5	7	10

SMD Table



Curvature Gauge

Brasseler USA

One Brasseler Blvd.
Savannah, GA 31419

Toll Free: 800.841.4522

Phone: 912.925.8525

Fax: 888.610.1937

RaCe™ Endodontics

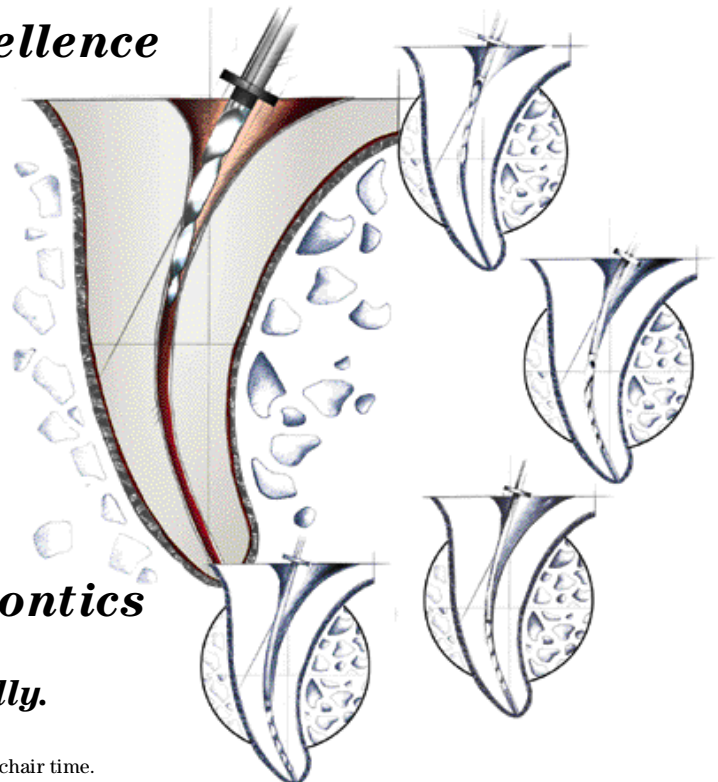
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B-1812-50M.5.02-KPC

Systems for Endodontic Excellence



Brasseler USA RaCe™ Endodontics

Consistently. Rationally. Systematically.

Invest a few minutes with a Brasseler USA representative and save hours in chair time.

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