



FKG

swiss endo



Race family
Endodontic NiTi rotary files

► Foreword

Race (Reamer with **A**lternating **C**utting **E**dges)

With the appearance of nickel-titanium (NiTi) alloy, the domain of endodontic instrument production discovered a material which is flexible, extremely elastic, resistant and bio-compatible. Working in continuous rotation became possible, through which a simplicity of use and incomparable time savings were achieved.

Most conventional reaming instruments (in stainless steel) are designed like screws, having one or more cutting helixes. The file design was not adapted to the new alloy, therefore, when used in continuous rotation, one main inconvenience appeared: the increased risk of screwing-in and blocking, which inevitably ends up in the instrument fracturing.

FKG Dentaire went a step ahead and developed a totally new file design to take advantage of the NiTi characteristics and to mitigate the limits which are imposed by continuous rotation: the Race was born.

The Race system is the simple and advanced answer for endodontic treatments with a complete family of shaping and retreatment files with exclusive advantages and features.

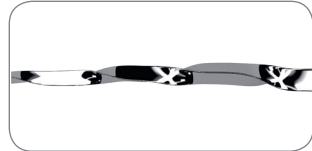
According to your needs, you can choose different kinds of sequences, proposed as sets (in sterile and non-sterile versions) or select your own sequence.

► Exclusive

Elimination of screwing-in effect

Alternating cutting edges

- The exclusive **patented file design** avoids screwing-in effect and allows a **better control** of the instrument's progression

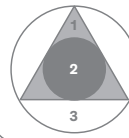


Optimal cutting efficiency

Triangular cross-section with sharp edges

- **Cuts better and faster**, without any pressure (1)
- The smaller core grants a **higher flexibility** (2) and allows a better progression in curved canals
- **More space for debris removal** (3), improving debris evacuation to avoid instrument blocking

- 1 Sharp edges for an optimum cutting
- 2 Thin core for increased flexibility
- 3 More space for debris removal



Exclusive rounded safety tip

Perfect centering of the instrument in the canal

- Bypasses irregularities and **avoids lateral canals**
- **Less risk of perforations** and ledges



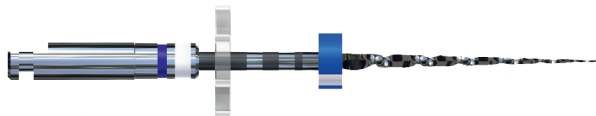
Electrochemical polishing

Enhanced resistance against fatigue and corrosion

- The treatment **eliminates surface imperfections**, reducing drastically the risk of weak points (micro-cracks)
- The resulting shiny surface **allows better cleaning and disinfection**, improving the sterilization process



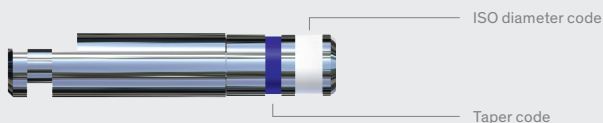
► Description



New finish on metal handles for contra-angle

The aim is to provide easy identification of the ISO diameter (wide ring) and of the taper (narrow ring). The information remains visible when the instrument is inserted in the head of the contra-angle.

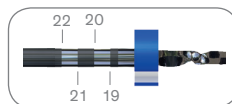
- Handle length 12 mm with Crominox coating, paint marking of ISO and taper codes



Depth marks

On instruments of length 21/25/31 mm only

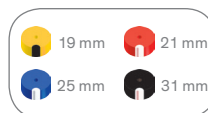
- Allow determination of the instrument's position with X-ray and control of the working length



Silicone Endo stop

To mark working length, radio opaque

- The stroke identifies the original tip direction in the root canal (stainless steel instruments)
- ISO Colours - to indicate instruments' length



► Golden rules

Optimal use of Race instruments

- ▶ Speed: 600-1'000 rpm - Torque: 0.5-1.5 Ncm, depending on instruments.
- ▶ Gentle back and forth movements without using force.
- ▶ Light hand, let the instrument do the work.
- ▶ Work for 3-4 seconds, remove.
- ▶ Clean the blade and irrigate the canal.

Which motors can the Race files be used with?

Unit motors, to reach the minimum recommended speed of 600 rpm:

- ▶ Air motors 20'000 rpm: use a contra angle 32:1 reducer
- ▶ Electric motors 40'000 rpm: use a contra angle 64:1, 70:1 reducer

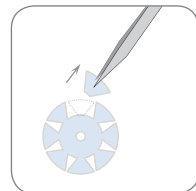
Endodontic motors, corded or cordless like the Rooter:

- ▶ Set the speed to 600-1'000 rpm and the torque to 0.5 to 1.5 Ncm

How many times can a Race (not single use) be used?

To master metal fatigue and number of uses, please follow the instructions for petals removal of the SafetyMemoDisc (SMD) hereafter:

- ▶ 1 petal corresponds to Simple cases, that is, straight, slightly curved and/or wide canals.
- ▶ 2 petals correspond to moderately complex cases, that is, more curved or narrow canals.
- ▶ 4 petals correspond to complex cases, that is, canals with extreme curvature or S-shaped, very narrow or calcified.
- ▶ Discard the instrument when all petals have been removed



- *Although Race instruments can be sterilised and reused several times, it is recommended to use them according to the "single patient" principle to avoid the risk of cross-contamination.*

► Available sequences

ScoutRace, for mechanised glide path preparation

Sequence of 3 instruments with .02 taper and with ISO sizes of 10, 15 and 20. Designed to mechanically prepare the glide path of root canals: straight, with severe curvature or «S» type.

Race ISO 10, for preparation of calcified or narrow canals

3 instruments all with a size of ISO 10 and with .02, .04 and .06 taper. Designed to permeabilize calcified or very narrow canals when manual K files of ISO 06 or 08 cannot progress further.

BT-Race, biological and conservative

The ready to use BT-Race sequence is sterile-packed and single-use. The sequence, with 3 files, is suitable for most types of canals and allows to reach a final apical size of ISO 35/.04*

iRace, quick, effective and safe

Only 3 iRace files are needed to treat most cases. iRace sequence is easy to learn and to use, meaning considerable time saving and allows a final apical size of ISO 30/.04*

BioRace, reliable and biological

BioRace has been specially designed to achieve the biological aim of the root canal treatment without compromising efficiency. The sequence - 6 files - is made to reach apical size of ISO 40/.04*

EasyRace and XtremeRace, the basics

Two basic sequences of 5 files each to enter the world of endodontics, easy to implement. They allow to finish at a final apical size of ISO 25/.06*

D-Race, root filling removal

D-Race files are intended to remove different filling materials - up to working length with only 2 instruments - such as gutta-percha, carriers, paste and resin-based materials.








*For bigger apical size preparations, please refer to availability chart hereafter

► Availability

The Race instruments are also available as sets of individual sizes:

- ready to use sterile products in blisters
- non-sterile products in blisters or conventional plastic boxes

BT-Race sequence is exclusively available in sterile blisters and intended to single-use. Only additional BT-Race 40 and BT-Race 50 files are proposed in individual sizes

		Wide ring ø ISO										
Narrow ring Taper		10	15	20	25	30	35	40	45	50	55	60
PreRace	.10 							●				
	.08 						●					
	.06 					●		●				
Length: 19 mm		<i>N.B. PreRace 35/.08 and 40/.10 are also proposed in stainless steel</i>										
Race	.06 	●	●	●	●	●	●	●				
	.04 	●	●	●	●	●	●	●		●		
	.02 	●	●	●	●	●	●	●	●	●	●	●
Lengths: 21/25/31 mm												
Race & BT tip	.04 							●		●		
Lengths: 21/25/31 mm												

For more information, FAQ, videos on Race instruments, please visit www.fkg.ch



FKG Dentaire SA

Founded in 1931, FKG Dentaire SA is today at the very cutting edge of development, production and distribution of dental products for dentists, endodontists and laboratories. Precision has always been central to FKG, and the company naturally made its base in «Watch Valley», home to most Swiss watchmaking and microtechnical companies.

FKG was given a new lease of life in 1994, when Jean-Claude Rouiller took up the reins. A CEO with a vision, he set out a strategy based on innovative products and on the concept of machinery specially manufactured for the dental industry. Mr Rouiller also

enlarged the distribution network to encompass more than 80 countries worldwide.

FKG products are certified according to international norms and standards.

The Swiss Venture Club named FKG «Western Switzerland Company of the Year 2012», a reward for the company's dynamism, high product quality, and its continuing innovation.

**« Western
Switzerland
Company of the
Year 2012 »**



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