



# **BT-Race** Biological and Conservative

# The BT-Race Sequence

This sequence enables treatment of a majority of canals with just three instruments, in compliance with established biological standards, and all without compromising safety.

BT-Race is sterile-packed in a cleanroom environment. As they are singleuse tools, cross-contamination is prevented and the stress on instruments is minimised. The goal is endodontic excellence, and with the sequence's ease of use, economical price and its efficiency, it is a real step forward – benefitting dentists, endodontists and patients alike.

### Exclusive advantages

**Race** instruments have well-known advantages including a non screw-in design, electropolished finish, safety tip, as well as its optimised cut that removes debris with excellent efficiency.

The new **BT-Race** files have a "Booster Tip" (BT) patented by FKG which increases the files efficiency. The sequence and Booster Tip allows the practitioner to achieve adequate apical preparation sizes in all types of canals with unparalleled ease with only 3 files. Further exclusive advantages include:





#### Sterile

- Files are sterile and packed in individual cells. Thus the instruments are ready to use and files that are not used stay sterile
- Associated costs are reduced (such as storage and handling)
- Instrument use is guaranteed to be totally hygienic

#### Single-use instruments

- Patient cross-contamination is prevented
- Few instruments, the practitioner follows a simplified workflow, which gains time and benefits the patient too
- ► The instruments are subject to less stress, reducing risk of breakage
- Cleaning, autoclaving and maintenance of instruments are things of the past.
   The single use set up reduces time of handling the files used and cost involved

#### Adhere to biological standards

- The efficiency of the files, the clean cut of dentine at 800 rpm and a sequence design that removes small parts of the canal wall ensure easy progression and minimise the risk of micro-cracks both coronally and in the apical parts
- Minimal weakening of the coronal part and the root of the tooth thanks to the low taper (final preparation of 35/.04)
- The design of the Booster Tip (BT) and the safety tip ensure the canal anatomy is respected
- Biological preparation to guarantee a sufficient cleaning of the apical third
- Outstanding removal of debris

# ► The BT-Race Sequence

BT-Race: 3 sterile single-use instruments

The BT-Race Sequence ensures a minimal biological apical preparation of ISO 35/.04:

**BT1, 10/.06:** is used for canal exploration, the creation of a glide path and conservative enlargement of the coronal third. Small apical diameter and large taper clears the coronal part of the canal.



**BT2, 35 :** preparation of the apical third. Patented file with BT tip; in spite of ISO 35 diameter, file remains flexible thanks to the non taper design; easy and efficient penetration is accomplished thanks to the BT tip.



**BT3, 35/.04 :** final shaping for the most common canals. All the advantages of the Race design plus the BT tip allow this 35/04 file to effortlessly join the coronal and apical preparations created by the BT1 and BT2. Thus stress on the file and dentine is minimised.

**Packaging :**  $2 \times 1$  BT-Race Sequence of 3 instruments **Single-use :** the sequence is designed for use in one case only (ideal for molars with 4/5 canals)

### BT-Race XL: complementary, single-use, sterile

#### instruments

These 2 instruments enable finishes at ISO 40 and 50 when adequate apical sizes require larger files:



BT 40, 40/.04: final shaping for large canals. Easy penetration thanks to the BT tip.



BT 50, 50/.04: final shaping for larger canals. Easy penetration thanks to the BT tip.

For larger apical preparations than ISO 50, the Race range of instruments is available, up to the required size.

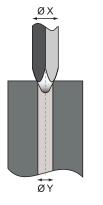
**Packaging :**  $6 \times BT40$  or  $6 \times BT50$ **Single-use :** the instruments are designed for use in one case only (ideal for molars with 4/5 canals)

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# The BT tip specifics (Booster Tip and Biological Treatment)

- Removes an increased amount of material with each cut and enables thus a faster progression through the canal, while respecting its anatomy and shape
- Has 6 cutting edges at the tip, for increased cutting efficiency
- ► Its revolutionary shape enables the use of fewer instruments per treatment

ISO 35





The diameter X file cannot progress in the canal. It would be necessary to use firstly a smaller size file or one equal to Y. ISO 15

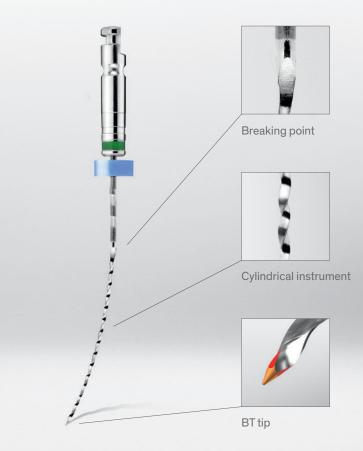
2. BT tip in the same canal

Thanks to the BT tip, the diameter X of the file can progress in diameter Y canal. 3. Path of the safety tip, with guide

Unique safety tip for a precise guidance and centring of instruments.

# The specifics of BT2

- Clears the apical canal to size #35 ensuring that files that follow are not blocked and are not stressed
- No taper, the file remains very flexible and can therefore operate in any type of curvature
- Thanks to the BT tip and safety tip, apical progression is efficient following the use of BT1
- Breaking point located 16 mm from the tip to avoid all risk of breaks at the tip



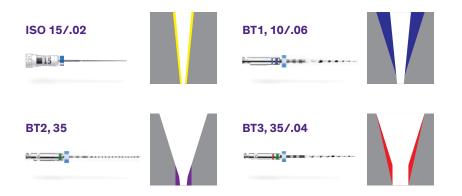
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# Protocol BT-Race

### For most cases Speed : 800 rpm (600-1000 rpm)

- 1. After the coronal access is attained, the working length should be obtained with small hand files (ISO 06, 08, 10 or 15) depending the constriction of each canal.
- 2. A glide path should be performed with small stainless steel or NiTi files up to ISO 15 before using BT-Race sequence.
- Files of the entire sequence should be used to full WL before changing to the next file in the sequence. Per file, total working time in one canal should not exceed 10 seconds.
- 4. Use the BT1 with a long and gentle pecking motion (3-4 back and forth strokes). If BT1 does not reach WL, clean the instrument, irrigate and repeat until the WL is achieved.
- 5. Recapitulate with K-File ISO 15 to keep the glide path open, irrigate.
- 6. Use BT2 up to WL in the same manner as BT1.
- 7. Recapitulate with K-File ISO 15, irrigate.
- 8. Use BT3 up to WL in the same way as BT1.

#### **BT-Race protocol illustrations**



# Protocol BT-Race XL

For larger apical sizes Speed : 800 rpm (600-800 rpm)

- BT3 is used for minimal biological apical preparation.
- ► For larger apical preparations use BT40 or BT50.

### Golden rules

Recommended speed: 800 rpm Torque: 1.5 Ncm

- Glide path should be established before using BT-Race sequence (minimal size ISO 15/.02).
- All files should be used with long and gentle pecking motion (3-4 back and forth gentle strokes).
- Copious irrigation throughout the procedure.

### References

	21 mm	25 mm	31 mm
BT-Race sequence (2 x)	S1.7B0.00.SCN.FK	S1.7B0.00.SCO.FK	S1.7B0.00.SCP.FK
BT-Race 40 (6 pcs)	S1.7B0.00.0FC.FK	S1.7B0.00.0FD.FK	S1.7B0.00.0FE.FK
BT-Race 50 (6 pcs)	S1.7B0.00.0FF.FK	S1.7B0.00.0FG.FK	S1.7B0.00.0FH.FK

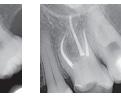
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## Clinical cases

Case 1







Symptomatic Pulpitis

MB1 & MB2: BT3; DB: BT40; P: BT50

Symptomatic Pulpitis

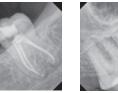
Case 4

Case 2

MB1 & MB2: BT3 DB: BT40; P: BT50

#### Case 3







Irreversible Pulpitis

MB & ML: BT3 D: BT50

Irreversible Pulpitis

MB1& MB2: BT3 DB: BT40; P: BT50

Cases 1 and 2: Courtesy of Dr. Gilberto Debelian (Norway) Cases 3 and 4: Courtesy of Dr. Martin Trope (USA)



#### FKG Dentaire Sàrl

Founded in Switzerland in 1931, FKG Dentaire Sàrl gained a new momentum in 1994, the year Jean-Claude Rouiller took over the reins of the company.

He propelled FKG to the forefront in the development, manufacturing and distribution of dental products destined for general practitioners, endodontists and laboratories.

The FKG strategy is centered on innovative high-precision products and the creation of machines designed specifically for the dental field. Its aim is to offer solutions that meet the most demanding needs of end users.

In 2011 the son of Jean-Claude Rouiller, Thierry, succeeded to the head of the company. Through his ncentive, the network of distributors has expanded significantly and allowed FKG to make its products available in over 100 countries worldwide. In 2012, the Swiss Venture Club rewarded FKG for its dynamism, high product quality, and its continuing innovation.

Equipped with a clean room since 2013, FKG is now developing a range of sterile products.

In 2013 and 2014 the company unveiled state-of-the-art training centers in La Chaux-de-Fonds, Dubai, and Oslo.

FKG Dentaire is certified according to international norms and regulations.



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