



## **BioRaCe**

**Safe and Efficient NiTi Rotary System**

**Fulfilling the Biological Requirements for Successful Endodontics**



Endodontics is the prevention or elimination of apical periodontitis. Since root canal infection is the cause of apical periodontitis, the biological aim of root treatment is the prevention or elimination of root canal microbes. Consistent success in endodontics requires high technical skill in order to achieve a biological aim. It is well established that in order to remove enough microbes from the root canal to ensure predictable success the apical third of the canal must be instrumented to certain minimum sizes (see chart)(ref). Most instrumentation systems require an additional step in order to adequately achieve minimum sizes in the apical third of the canal. This results in additional files, time and expense for the practitioner.

The **BioRaCe** system is unique in that it has been especially designed to achieve the required apical sizes without the need for additional steps and additional files. If used according to instructions, most canals can be effectively cleaned with 5 NiTi files. Thus with the use of the unique **BioRaCe** system, the biologic aim of root canal treatment is achieved WITHOUT compromising efficiency.

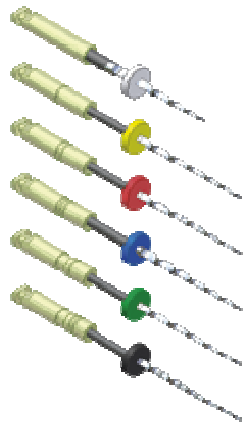
# Concept

**BioRaCe** instruments present the same physical characteristics of well known **RaCe** instruments.

BioRaCe differs from standard RaCe instruments in regard to instruments tapers (BR0 and BR1), sequence and dedicated handles. The major goal of **BioRaCe** is to achieve apical preparation sizes that are scientifically proven with the use of antimicrobial irrigation to effectively disinfect the canal.

**BioRaCe** has been uniquely designed to clean the root canal efficiently and safely with few instruments. The changes in sequence of sizes and tapers has allowed the required apical sizes to be achieved without increasing the number of instruments.

**BioRaCe** has only 4 instruments to adequately prepare the apical part of the canal (35/0.04, 40/0.04, 50/0.04 and 60/0.02). For severe curved canals **BioRaCe** has 2 additional flexible instruments to prepare the apical part 35/0.02 and 40/0.02. [The attached chart](#) describes the required minimal apical preparation sizes based on morphometric and anatomic studies of the root canal system (ref...). Please, consult it before the treatment is initiated.



**The BioRaCe Basic Set**



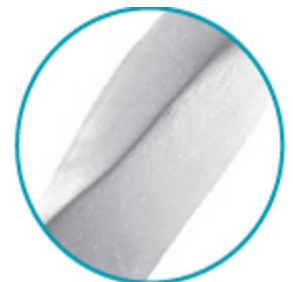
Non-cutting Safety Tip



Alternating Cutting Edges



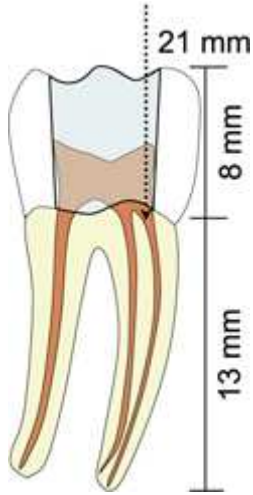
Sharp Cutting Edges (triangular cross section)



Exclusive Electro-Chemical Surface Treatment

## Sequence

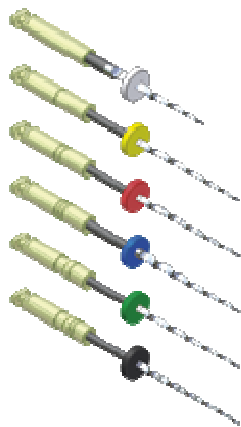
### Pre-Operative Procedures



- Take parallel pre-operative pre-operative radiograph(s)
- Place rubber dam (rubber dam may be placed after penetrating the roof of the pulp chamber, in case of a difficult access).
- Perform access
- Localize canal with an endodontic probe
- Remove coronal curvatures and establish straight line access to the canals orifices
- Use disinfectant over the pulp chamber, tooth and 1 cm of surrounding rubber dam
- Establish working length with an Electronic Apex Locator (EAL) with SS k-files (e.g. 25mm - #08-15)

## Instrument

### Basic Sequence



### Extended Sequence

