

**COMPOSITION**

The instrument is made of nickel-titanium alloy. All files are constant tapered.

**EdgeFile® XR Indications for Use:**

These files are used in Endodontics for retreatment endodontically treated teeth by the removal of root canal filling, dentin, and root canal shaping. They can be used in the same hand piece as other NiTi rotary instruments.

**Contraindications**

Like all mechanically driven endodontic instruments they should not be used in cases with very severe and sudden curvatures.

**Warnings**

- A rubber dam system should be used.
- The rotary files are non-sterile and must be sterilized before patient use.

**Precautions**

As with all products, use carefully until you become proficient with use. Always determine working length using radiographs and/or apex locator to properly use rotary files.

**Important points to remember:**

1. Use an electric hand piece.
2. Operate rotary files at 300-500 rpm (revolutions per minute).
3. Straight-line access is imperative for proper rotary file use and endodontic re-treatment.
4. Use light to medium apical pressure on the files with the chamber flooded with a root filling solvent.
5. Clean the flutes frequently and at least after removing the files from the canal.
6. Irrigate the canals and chamber with a root filling solvent frequently throughout the procedure.
7. Take each rotary file to length only one time and for no more than one second.
8. In apical areas and curved canals exercise caution.
9. Rotary files are single patient use devices.

**Adverse Reactions**

This product contains Nickel and should not be used for individuals with known allergic sensitivity to this metal.

**STEP-BY-STEP INSTRUCTIONS**
**Sterilization**

Files must be sterilized before use. ANSI/ADA Specification 28 recommends:

- Scrub the instruments with soap and warm water.
- Rinse thoroughly with distilled or deionized water.
- Allow to air dry.
- Place the instruments, unwrapped, in an autoclave tray.
- Use fresh distilled or deionized water.
- Steam Autoclave at 136° C (plus or minus 2° C) for 20 minutes.
- EdgeFile® rotary files are for single patient use.
- Recommended File Disposal: Place used files in a Biohazard Sharps container.

**Straight-Line Access**

- Be sure your access preparation has straight-line access.

**EdgeFile®XR Retreating Endodontic Cases**

1. Flood the chamber with a root filling solvent.
2. Keeping the chamber flooded, use the following crown-down sequence: R1 (25/12) to R2 (25/08) to R3 (25/06) then to R4 (25/04). Use light to medium

pressure moving each instrument down the canal only about 2-4 mm, then go to the next instrument. Repeat the sequence R1 to R2 to R3 to R4 until the R4 (25/04) is to the working length. If you desire a larger file size then the R4 (25/04), use either a 04 or 06 taper file from the X7 Series and take the next tip size up to the working length. Repeat taking the next tip size up to the working length until you have the desired tip size.

**Safe Unwinding**

As a safety feature the files are designed to unwind. They may be used until the files unwind backwards.

**Canal Cleansing**

1. Use your own technique or rinse with **EdgeLube™** Liquid for 1 minute in each canal.
2. Rinse with NaOCl for five minutes
3. Obturate canal with the X7 **EdgeCore™**, **EdgeFill™** OR **EdgePoints™**, or your current obturation technique.

**Electric Handpiece**

See manufacturer specifications.

**Obturation of Canal Systems**

- When using thermal carriers such as **EdgeCore™ X7** or **EdgeFill™ X7**, use size verifiers to determine the proper sized carrier.
- When using a master gutta percha cone that matches the largest file taken to length, remember sometimes you may need to drop down in cone tip size if the corresponding gutta percha to your final rotary file does not go to length.

**Speed and Torque**

Use the same hand piece with the same speed and torque settings you are currently using with your rotary system. Or if you wish, you can use for all **EdgeFile®XR** rotary files the following speed and torque settings for all files.

Speed	Torque
300-500 rpm	300 g-cm

**Reciprocating motors**

The XR can be used in a clockwise reciprocating motor but not in the WaveOne reciprocating motor which moves in the counter-clockwise direction. The X1 is designed specifically for use in only the WaveOne reciprocating motor and setting.

