

# FAQ

| “Reciproc instruments/files” = **RECIPROC® & RECIPROC® blue** |

## 1. What is the reciprocating movement?

The reciprocating movement is the most basic backwards and forwards movement that is known from hand files. Reciproc files use a very precise mechanical reciprocating movement: The instrument alternates between clockwise and counterclockwise rotation. A rotation of 360° is completed in several reciprocating movements. Since the rotation in the cutting direction is larger than the reverse rotation, the instrument advances towards the apex.

## 2. What is unique about Reciproc instruments?

Reciproc instruments offer all the advantages attached to root canal preparation with only one instrument and the possibility to eliminate initial hand filing in the majority of cases without losing efficiency. The unique file design combined with its unique motion lead to less instrument fracture. Root canal preparation with Reciproc files is easy to learn compared to rotary systems – also for new users.

## 3. How do I use Reciproc instruments?

With the reciprocating technique, the instrument is advanced apically with a pecking motion in sets of three pecks. After each set of three pecks, remove the instrument, clean the flutes and irrigate the canal (see step by step card). In case of oval canals, the instruments should be used in a brushing motion to reach parts of the canal which are not reached with the pecking motion alone.

## 4. Which motor settings should I use?

The angles of reciprocation are precise and specific to the design of the Reciproc instruments and the VDW motors to ensure that the load on the instrument does not exceed its elastic limit. Thus, the risk of instrument fracture can be minimized. The Reciproc settings in the VDW motors have been selected and tested specifically for Reciproc instruments. RECIPROC® and RECIPROC® blue are used with the same motor settings: *RECIPROC all*.

## 5. When should I use which Reciproc instrument?

VDW recommends the use of RECIPROC® blue for the majority of cases whereas for retreatment, VDW recommends to use RECIPROC® files. Nevertheless, all cases can be treated with each Reciproc instrument depending on personal preferences. The different sizes are meant to be used in different canal anatomies: R25 for narrow canals, R40 for medium canals and R50 for wide canals.

## 6. What's the difference between RECIPROC® and RECIPROC® blue?

RECIPROC® blue is heat treated which results in its blue color and increased flexibility of 40% compared to RECIPROC®. Furthermore, RECIPROC® blue is more resistant to cyclic fatigue.

## 7. What makes the reciprocating preparation safer than rotary preparation?

The reciprocating movement relieves stress on the instrument and, therefore, reduces the risk of cyclic fatigue caused by tension and compression. At the same time, reciprocation ensures that the instrument stays centered in the canals.

## 8. How often can I use Reciproc instruments?

Reciproc instruments are designed for single-use, on max. one molar. As for every endodontic instrument, check instruments visually for wear after each canal and discard instruments showing any kind of wear.

## 9. Why are Reciproc instruments for single use only?

A Reciproc instrument does the job of several hand and continuous rotary instruments and is therefore subjected to more stress, which could lead to file breakage. Limiting the instrument use to max. one molar reduces this risk.

## 10. Do I need to clean and sterilize Reciproc instruments?

Reciproc instruments are delivered ready to use, pre-sterilized in blister packaging and should be discarded after use. Being made for single use only, Reciproc instruments cannot be autoclaved due to its non-autoclavable handle. Thus, there is no need for cleaning, sterilizing and sorting instruments after use, which considerably reduces the risk of contamination to staff and eliminates the risk of cross contamination between patients. Also, file documentation becomes obsolete, making workflows even more efficient.

## 11. Do I have to create a glide path?

Shaping with R25 can be done without creating an initial glide path (with SST hand files or mechanical glide path instruments) until reaching 2/3 of the estimated working length. Only then exact working length is determined using an apex locator and bringing an ISO size 10 hand instrument (e.g. C-PILOT®) to full working length. In that same step, the hand instrument is also used for scouting the curvature. In case the scouting hand instrument needs to be pre-bent to reach working length or does not reach working length at all, the creation of a glide path until ISO size 15 is required (e.g. C-PILOT® ISO 08, 10, 15).

This procedure is possible thanks to the cutting efficiency of the Reciproc instruments and the centering ability of the reciprocating movement. The instrument follows the natural canal anatomy and the reciprocating motor settings ensure that the load on the instrument does not exceed its elastic limit. Thus, even if the tip of the file gets blocked in the canal, the risk of file breakage is minimized.

## 12. Which obturation technique can I use after using Reciproc instruments?

After preparation with Reciproc files, any obturation technique can be used. For cold obturation techniques (single-cone technique) or as a master cone for warm vertical condensation, use the matching Reciproc Gutta-Percha. For a warm three-dimensional filling, use GUTTAFUSION® for RECIPROC® (*blue*) obturators available in sizes R25, R40 and R50.

## 13. Can RECIPROC® Gutta-Percha also be used for RECIRPOC® *blue* obturation and vice versa?

You can use RECIRPOC® obturation material for canals shaped with RECIPROC® *blue* or the other round. Yet, VDW recommends to use RECIPROC® *blue* obturation material for canals shaped with RECIPROC® *blue* or RECIPROC® as we increased the fit of the Gutta-Percha.

## 14. Is the RECIPROC® and RECIPROC® *blue* Gutta-Percha latex-free?

All Gutta-Percha points are made synthetically and do not contain latex.

## 15. Is there a danger of transporting infected tissue and dentin to the apical area when using the Reciproc technique?

No. With the reciprocating technique, the instrument is advanced apically with a pecking motion in sets of three pecks. After each set of three pecks, remove the instrument, clean the flutes and irrigate the canal (see step by step card). This and the reverse movement ensure that debris produced in the upper and middle thirds of the canal is removed before taking the instrument to full working length.

## 16. Can severely curved canals be prepared and retreated with Reciproc instruments?

Yes. The forward and reverse movement of the reciprocating motion allows the Reciproc instrument to advance gradually around a severe curvature. Additionally, the centering ability of Reciproc files when used in reciprocation together with the flexibility enables the preparation of severely curved canals. The forward and reverse movement in reciprocation allows successive progressing, which makes it possible even for large instruments to properly work in narrow and highly curved canals.

## 17. Can I pre-bend the RECIPROC® *blue* file? If so, why would I do that?

The file can be pre-bent or straightened easily. Pre-bending the last 3mm of the file is a major advantage to easier access canal orifices and to go past previously made ledges or perforations in the canal wall. When pre-bending the file, only start the motor when the tip is already engaged into the canal.