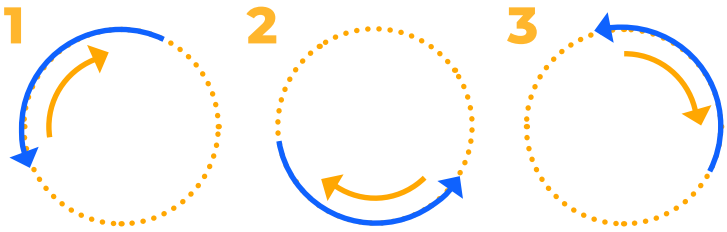
WaveOne® Gold + X-Smart® Pro +

Perfect Match

What is the reciprocating motion?

First introduced on the market in 2010 by Dentsply Sirona, the reciprocating motion **replicates the manual back and forth motion**, "the balance technique"[1].



When it turns one way *(counterclockwise)*, it cuts *(engages)*. When it turns the other way *(clockwise)*, it stops cutting *(disengages)* and gets ready to cut again. After it does this back-and-forth three times, it has made one full circle!

Benefits of the movements:

The disengagement of the instrument occurs before excessive torsional stress is transferred onto the metal alloy and before the instrument can bind *(taper lock)* into the root canal, providing some advantages over continuous rotations systems.

a. Reduction torsional stress and reduced risks of instrument separation[2]

b. Progression to the apex without applying too much force (which could be risky or harmful)[3]

c. Enhanced debris removal[4]

WaveOne® Gold + X-Smart® Pro +

Our **genuine reciprocating** motor motion **is the only motion** designed to drive Dentsply Sirona's endodontic files system, making it the perfect match.

The motion settings, including the combination of speed, acceleration, torque and angle are not public data and cannot be manually programmed by clinicians in any endodontic motor.

The X-Smart® Pro+ was designed for optimal performance with WaveOne® Gold.




Certificate of Authenticity

Dentsply Sirona

To whom it may concern,

WaveOne® Gold and Reciproc® family endo files have been developed and validated by Dentsply Sirona and have been sold on the market for many years. Given the proliferation of new endodontic motors on the market place lately - some of them wrongly claiming to have been validated to work with our WaveOne® Gold solution and Reciproc® family - the following clarification appears necessary:

- The WaveOne® Gold and Reciproc® systems are patented for their unique features. Their motion settings, including the combination of speed, acceleration, torque and angles are not public data and cannot be manually programmed by Clinicians in any endodontic motor.

Genuine WaveOne® Gold Reciprocating Motion

Genuine Reciproc® Reciprocating Motion

- The WaveOne® Gold and Reciproc® family files have been specifically designed to be used only with the following Dentsply Sirona drive system options.

Dentsply Sirona only recommends usage of the WaveOne® Gold and Reciproc® family endo files with these drive systems featuring the genuine reciprocating motions.

Benoit Cante — Marketing Product Manager

Steffen Mueller — R&D Project Manager

Nicolas Crenoisier — R&D Expert File Designer

1. J. Roane, et al. The Balance force concept for instrumentation of curved canals, J. of Endodontics, 1985. 11(5): p203-211
2. Compared to rotary mechanized preparation. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7020062/
3. Yared, G., Canal preparation using only one Ni-Ti rotary instrument: preliminary observations. Int Endod J, 2008. 41(4): p. 339-44
4. De-Deus, G., et al., Apically extruded dentin debris by reciprocating single-file and multi-file rotary system. Clinical Oral Investigations, 2015. 19(2): p. 357-361

TRUSTED ENDO PARTNER