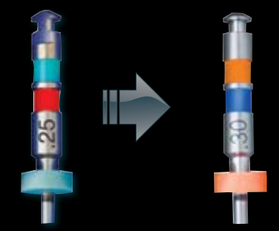
THE TF TECHNIQUE

TWISTED FILES
TFwithRphase.com



Taper – .08 / Tip – 25

Taper – .06 / Tip – 30

Taper – .06 / Tip – 35

OR

Taper – .04 / Tip – 40

Confirm Coronal Patency

Prior to using TF, achieve straight line access to the coronal 1/3 and establish an apical glide path with at least a #20 hand file.

File Usage

With the file rotating freely as you enter the canal, advance the file with a single continuous and controlled motion until the file engages dentin, and then withdraw the file. Do not force the file apically.

STEP 1

- Take the TF .08/25 until it engages dentin and then withdraw immediately.
- Wipe the flutes, irrigate and recapitulate with a stainless steel hand file to confirm patency.
- Repeat Step 1 with the same TF file until TWL is achieved. *If significant resistance is met before TWL is achieved, proceed with the TF .06/25 using the same steps.*

STEP 2

Next insert the TF .06/30, following the procedures in Step 1.

For #30 tip size apical shape, you can stop at this point and begin your obturation.

STEP 3

For final apical shape larger than #30, use the following appropriate tip size:

.06/35 for #35 tip size

.04/40 for #40 tip size

- Motor speed: 500 RPM
- Wipe the flutes of the file after each insertion.
- Irrigate and recapitulate with a stainless steel hand file before you move to the next TF file in the sequence

For carrier-based obturation, a larger coronal flare is required.

TF

Taper	Tip	23mm	27mm
.12	25	822-2253	
.10	25	822-0253	822-0257
.08	25	822-8253	822-8257
.06	35	822-6353	822-6357
.06	30	822-6303	822-6307
.06	25	822-6253	822-6257
.04	50	822-4503	822-4507
.04	40	822-4403	822-4407
.04	25	822-4253	822-4257

TF SMALL ASSORTED

822-4683
23mm

Taper	Tip
.08	25
.06	25
.04	25

822-4687
27mm

Taper	Tip
.08	25
.06	25
.04	25

TF LARGE ASSORTED

822-6803
23mm

Taper	Tip
.10	25
.08	25
.06	25

822-6807
27mm

Taper	Tip
.10	25
.08	25
.06	25

TF SMALL APICAL ASSORTED

822-8663
23mm

Taper	Tip
.08	25
.06	30
.06	35

TF LARGE APICAL ASSORTED

822-6643
23mm

Taper	Tip
.06	30
.06	35
.04	40

SybronEndo | *Safe files, superior fills.*
A DIVISION OF SYBRON DENTAL SPECIALTIES

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SybronEndo

LESS
BREAK
MORE
THROUGH

GET TWISTED.

TWISTED FILES

WWW.TFwithRPhase.com

A NEW PARADIGM IN CANAL SHAPING

"The Twisted File is the endodontic equivalent of man stepping on the moon. Yes, it is breakthrough technology. But more than that, it presents a new paradigm in canal enlargement."

Richard E. Mounce, DDS, Vancouver, Washington

A Quantum Leap In File Design and Manufacturing

The Twisted File is the first and only file to combine three unique and proprietary processes to deliver unsurpassed strength and flexibility:

R-phase heat treatment technology

This proprietary technology is used to optimize the molecular phase and properties of nickel/titanium (NiTi). The resulting crystalline structure modification, which has been shown to be finer than traditionally-processed materials,[1] maximizes flexibility and resistance to breakage.[2]

Twisted design, not ground

Twisting optimizes grain structure and eliminates formation of microfractures, making the file even more durable. Other endodontic files are made by grinding flutes into the file. Grinding weakens the metal's structure at the molecular level and creates microfractures on the metal's surface–both of which can lead to file separation.

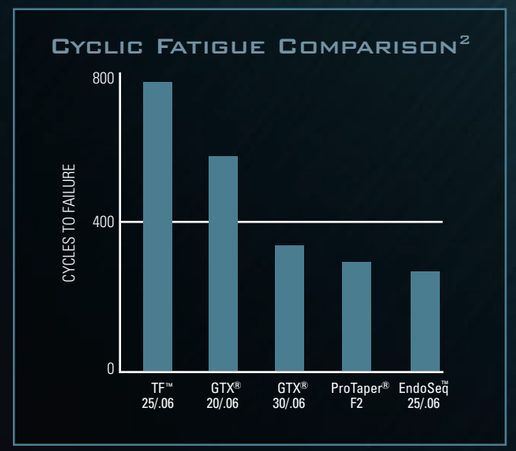
Advanced surface treatment

The Twisted File's special surface conditioning treatment finishes the file surface while respecting the integrity of the underlying grain structure. Tests show that this conditioning treatment increases the hardness of the file.[2]

Strength and Flexibility That Can Be Measured

The Twisted File has been proven to be stronger and more flexible than other rotary NiTi files in multiple laboratory comparisons:

- In a study of cyclic fatigue, the Twisted File performed two to three times better than traditional rotary NiTi files, and significantly better than ProFile GTX.[2]
- In a torsional stress comparison, the Twisted File was shown to absorb the greatest amount of energy before fracture by far. In fact, it can withstand about 60% more torque than files made using a traditional manufacturing process.[1]
- The Twisted File is up to 70% more flexible than other rotary NiTi files.[2]



1. Nicoll T, Oestreich L, Tang C, Ravi VA. Evaluation of product properties resulting from a new NiTi endodontic file manufacturing process. Chemical and Materials Engineering Department, California State Polytechnic University, 2006.

2. Data on file, Sybron Dental Specialties, Inc. Data from Gambarini G., Garala M. Cyclic fatigue and flexibility testing.

HERE'S WHAT'S IN IT FOR YOU

Safer, Efficient Shaping

The Twisted File is strong enough to enable you to shape ideal paths confidently, yet flexible enough to allow you to do it faster and more accurately in curved canals.

The Twisted File improves safety by resisting separation. Optimal sharpness, strength and flexibility allow you to work in difficult situations with greater efficiency and confidence. That translates to a better experience for both doctor and patient.

"In many cases with the Twisted File, I can use just one or two files per case. It saves me a minimum of 10 to 15 minutes of chair time per patient."

Thomas Jovicich, DMD, Encino, California

UNSURPASSED SAFETY

+

EXTRAORDINARY EFFICIENCY

=

TWISTED FILES

As Simple As 1-2-3

The Twisted File comes in packs of three. That's not an arbitrary number. They simply work more efficiently and last longer. The Twisted File:

- Significantly lowers the number of files used per endo case
- Improves clinical efficiency in completing endo cases
- Reduces chair time for patients
- Greatly lowers the level and cost of file inventory normally needed in the office

"The Twisted File has significantly increased my procedure efficiency. As a general practitioner, I can now treat emergency root canal patients on the spot. That means that patients are out of pain sooner, they are more satisfied, and my practice is more profitable."

Tony Soileau, DDS, Lafayette, Louisiana