

SybronEndo

LESS

**BREAK**

MORE

**THROUGH**

GET TWISTED.



TWISTED FILES

[www.TFWITHRPHASE.COM](http://www.TFWITHRPHASE.COM)



# A NEW PARADIGM IN CANAL SHAPING

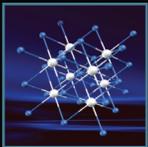
“THE TWISTED FILE IS THE ENDODONTIC EQUIVALENT OF MAN STEPPING ON THE MOON. YES, IT IS BREAKTHROUGH TECHNOLOGY. BUT MORE THAN THAT, IT PRESENTS A NEW PARADIGM IN CANAL ENLARGEMENT.”

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,<sup>1</sup> maximizes flexibility and resistance to breakage.<sup>2</sup>

### TWISTED DESIGN, NOT GRIND



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

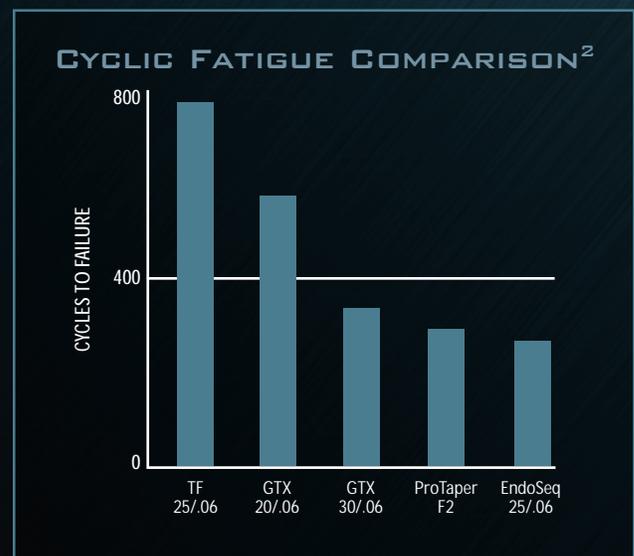


The Twisted File's special surface conditioning treatment finishes the file surface while respecting the integrity of the underlying grain structure. Tests show that this conditioning treatment increases the hardness of the file.<sup>2</sup>

## 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.<sup>2</sup>
- 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.<sup>1</sup>
- The Twisted File is up to 70% more flexible than other rotary NiTi files.<sup>2</sup>



# 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

## 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

**UNSURPASSED  
SAFETY**

+

**EXTRAORDINARY  
EFFICIENCY**

=



**TWISTED FILES**

# GET TWISTED.

## THE TF TECHNIQUE

### LARGE ASSORTED PACK (L-ASTD)



#### TYPICAL CASES

- Upper anteriors
- Cuspids
- Single canal premolars
- Distal roots of lower molars
- Palatal roots of upper molars

**Confirm Coronal Patency**  
Prior to using TF, achieve straight line access and establish an apical glide path with at least a #15 hand file.

**Crown Down**  
With the file rotating as you enter the canal, advance the file with controlled motion until you feel it engage 1–2 mm of dentin (avoid using force). Do not engage the dentin for more than 2–3 seconds.

#### STEP 1

Take the first TF file to resistance and then withdraw immediately. Proceed to the next file if WL has not been reached.

#### STEP 2

Take the second TF file to resistance and then withdraw immediately. Proceed to the next file if WL has not been reached.

#### STEP 3

Take the third TF file to resistance and then withdraw immediately. If WL has not been reached, repeat the entire series from the beginning.

- Motor speed: 500 RPM (always use a light touch).
- Clean the file after each insertion.
- Irrigate with NaOCl or EDTA, and reinsert hand file before moving to the next file in the sequence.

### SMALL ASSORTED PACK (S-ASTD)



#### TYPICAL CASES

- Mandibular incisors
- Multi-canal premolars
- Mesial roots of lower molars
- Buccal roots of upper molars

TO ORDER OR FOR MORE INFORMATION,  
CALL 1-800-346-3636 OR VISIT [WWW.SYBRONENDO.COM](http://WWW.SYBRONENDO.COM).



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TAPER	TIP	23 MM	27 MM
.04	25	822-4253	822-4257
.06	25	822-6253	822-6257
.08	25	822-8253	822-8257
.10	25	822-0253	822-0257
.12	25	822-2253	
S-ASTD	25	822-4683	822-4687
L-ASTD	25	822-6803	822-6807

\*Small assorted (S-ASTD) packs contain .04, .06 and .08 tapers.

\*\*Large assorted (L-ASTD) packs contain .06, .08 and .10 tapers.

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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.

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