

# Advanced design. Proven performance.

Discover the extraordinary flexibility of TF today!



## Advanced design and manufacturing

TF<sup>®</sup> by SybronEndo is the *first and only* file to combine unique and proprietary manufacturing processes to deliver unsurpassed strength and flexibility.

**R-Phase™ heat treatment technology** — This proprietary technology optimizes the metallurgy of NiTi files making them 70% more flexible and 2-3 times more resistant to cyclic fatigue than other rotary files.<sup>1</sup>

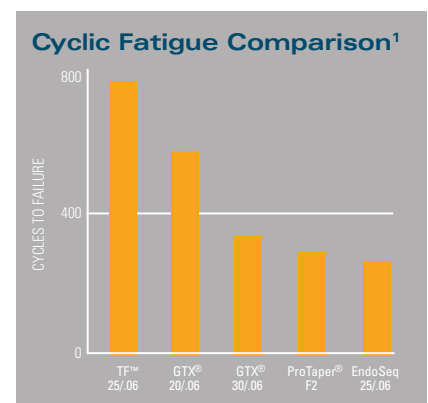
**Twisted, not ground** — Twisting optimizes NiTi grain structure and eliminates formation of microfractures, making the file even more durable. Other endodontic files are made by grinding flutes into the file, weakening the metal's structure which can lead to file separation.

**Advanced surface treatment** — TF'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>

## Proven performance

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

- In a study of cyclic fatigue, TF performed two to three times better than traditional rotary NiTi files, and significantly better than ProFile GTX.<sup>1</sup>
- In a torsional stress comparison, TF 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>2</sup>



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

2. 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.

## Simple 3-File Technique

Most brands of NiTi files require 5, 6 or even more files per case. Not TF from SybronEndo. The TF technique is just 3 files per case, perfectly matched to the type of tooth you're treating – one set for anteriors, another for premolars and molars.

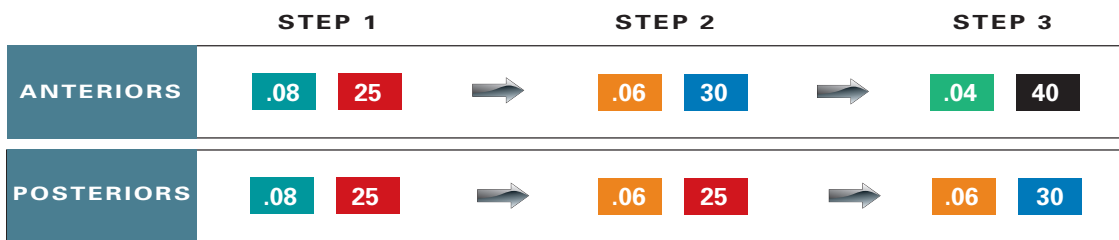
### TF Features

- R-Phase heat treatment technology
- Twisted design, not ground
- Advanced surface treatment
- Simple 3-file technique

### TF Benefits

- 70% more flexible & 2-3 times more resistant to cyclic fatigue
- Maintains natural anatomy of the canal better than other files
- Preserves dentin & adds to longevity of the post-RCT tooth
- Less file separation
- Increases hardness of file
- Makes set-up faster & inventory control easier
- Designed to treat a broad range of endodontic cases quickly & efficiently

## Simple Technique • Fewer Files • Great Results



## TF Taper and Tip Sizes

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		

TF LARGE ASSORTED			
822-6803 23mm			
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		

All cases are different. This technique guide is not intended to substitute for the clinician's diagnosis and treatment plan. Suggested technique should not be substituted for the clinician's professional judgement.

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