Advanced design. Proven performance.

Discover the extraordinary flexibility



Advanced design and manufacturing

TF® 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 metalurgy of NiTi files making them 70% more flexible and 2-3 times more resistant to cyclic fatigue than other rotary files.¹

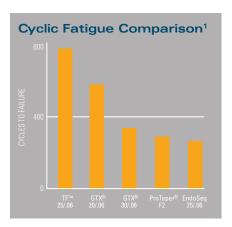
Twisted, not ground — Twisting optimizes NiTi grain structure and eliminates formation of microfractures, making the file even more durable. Other endodontic files are made by grinding flutes into the file, weakening the metal's structure which can lead to file separation.

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.²

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.¹
- 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.²



^{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.



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

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	TF Benefits
R-Phase heat treatment technology	 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
Twisted design, not ground	Less file separation
Advanced surface treatment	Increases hardness of file
Simple 3-file technique	 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-	822-4683			
23mm				
Taper	Tip			
.08	25			
.06	25			
.04	25			
				
822-4687				
27n	nm			
Taper	Tip			
.08	25			
.06	25			
.04	25			

[
TF LARGE A	SSORTED			
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				
.08 .06	Tip 25 30 35			
TF LARGE APICAL ASSORTED 822-6643 23mm				
.06 .06 .04	Tip 30 35 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.