

Typhoon™

Infinite Flex NiTi Files

Without Question, NiTi Endodontic Files Revolutionized Root Canal Therapy Almost Two Decades Ago

The flexibility of traditional NiTi files were a great improvement over stainless steel files, allowing curved canals to be addressed more easily. Further, the advent of rotary handpieces used with NiTi files formed the armamentarium of choice for virtually every endodontist and a large percentage of general dentists.

Also without question, NiTi files and rotary handpieces have shortcomings, the two most common being file separation and over-instrumentation of the canal. These, in fact, are why some general dentists are against using rotary-driven endodontics in their practices.

Infinite Flex Without the Memory

Typhoon™ Infinite Flex NiTi Files are constructed with revolutionary Controlled Memory NiTi™ Technology, which exhibits virtually no memory. While traditional NiTi files are flexible, they will always try to straighten when flexed within a canal. This causes unbalanced lateral cutting forces along the canal wall and often results in ledging, as well as excess tooth structure being removed unnecessarily. When you choose memory-free **Typhoon** files, the lateral forces are balanced throughout the length of the file. Canal navigation is effortless, regardless of the curvature of the canal, because **Typhoon** files adapt perfectly to the canal path for precise and conservative removal of tooth structure.

Aggressive and Safe

Cyclic fatigue and torsional stress are the two primary causes of file separation. The inherent memory of traditional NiTi files accentuates torsional forces and promotes cyclic fatigue. In the past, the more aggressive cutting ability of a NiTi file has always corresponded to a higher propensity for file separation due to stress points created along the file. Not any more!

In a university-based study directly comparing **Typhoon** files with a leading traditional NiTi file, **Typhoon** files proved to be at least 600% more resistant to fatigue stress.^{1,2} **Typhoon** files do cut aggressively, but thanks to memory-free CM NiTi™ Technology, they still maintain their torsional strength, so the risk of separation is dramatically reduced. With **Typhoon**, you will experience far superior cutting to what you are accustomed to, and you will gain significantly more confidence, especially in cases with curved canals.

Better Access for Posterior Teeth

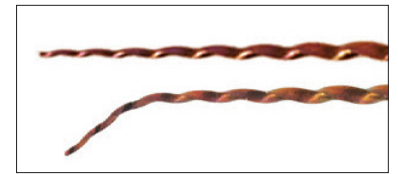
Here's one more significant clinical advantage: **Typhoon** files can be pre-curved to allow easier canal access in posterior teeth. Bend the file just as you would a stainless steel file. You will be in for a pleasant surprise, because you certainly can't do this with traditional NiTi files!

Choosing Your File Size and Sequence

While several different instrumentation sequences are possible, a crown-down file sequence is suggested for most canal shapes. You will get the best results from cycling back through the sequence until the desired coronal and apical shape is achieved. The advantages of filing in this manner are far-reaching. First, alternating tapers will help you to avoid "taper lock", and you can shape the canal using only 3-4 instruments. Perhaps most important, this sequence achieves adequate apical shape without sacrificing undue middle and coronal tooth structure.

1 Ya Shen, DDS, PhD, Wei Qian, DDS, PhD, Houman Abtin, BDS, Yuan Gao, DDS, PhD, and Markus Haapasalo, DDS, PhD Fatigue Testing of Controlled Memory Wire Nickel-Titanium Rotary Instruments. JOE – Volume 37, Number 7, July 2011

2 A.E. Abide*, V. Himel, J. Hagan. Effects of Manufacturing Techniques on Cyclic Fatigue of Nickel-Titanium Rotary Endodontic Files OR15 Abstract of Research Presented at the 2011 annual session of the American Association of Endodontists



Unlike traditional NiTi files, Typhoon files flex without rebounding.

.04 TYPHOON INFINITE FLEX NITI FILES

- 20/04 21mm
- 20/04 25mm
- 20/04 31mm
- 25/04 21mm
- 25/04 25mm
- 25/04 31mm
- 30/04 21mm
- 30/04 25mm
- 30/04 31mm
- 35/04 21mm
- 35/04 25mm
- 35/04 31mm
- 40/04 21mm
- 40/04 25mm
- 40/04 31mm
- 45/04 21mm
- 45/04 25mm
- 45/04 31mm
- 50/04 21mm
- 50/04 25mm
- 50/04 31mm

.06 TYPHOON INFINITE FLEX NITI FILES

- 20/06 21mm
- 20/06 25mm
- 20/06 31mm
- 25/06 21mm
- 25/06 25mm
- 25/06 31mm
- 30/06 21mm
- 30/06 25mm
- 30/06 31mm
- 35/06 21mm
- 35/06 25mm
- 35/06 31mm

CROWN DOWN PACK

- Contains: 4 files (1ea: 35/06, 30/04, 25/06, 20/04)
- 21mm
 - 25mm
 - 31mm

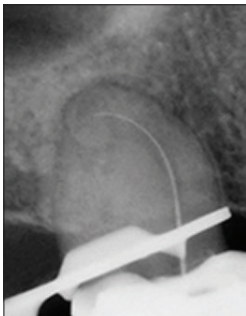
Typhoon™ X-plorer™

Canal Navigation Files

When hand instrumentation is used exclusively for creating a path to the apex of the root, often the canal can become transported or ledged. This is especially common when progressing from a #10 to a #15 file. This 50% increase in file diameter can make initial instrumentation to the apex very difficult and time consuming.

X-Plorer™ files are a set of unique canal navigation NiTi files. **X-Plorer** files will help you negotiate working length quickly and efficiently. Use the **X-Plorer** series after a #8 or #10 hand file. The first **X-Plorer** file, 15/.01, is more flexible than a #15 hand file and half the taper. You may then proceed with **X-Plorer** files 20/.01 and 20/.02 for an excellent reproducible glide path.

- #15/.01 taper file to negotiate working length quickly and efficiently
- More durable than typical glide path instruments, capable of negotiating tortuous anatomy
- Follow with #20/.01 and #20/.02 (and optionally, 25/.02) **X-Plorer** files for an excellent reproducible glide path
- #15/.01 is also available as a hand file



X-Plorer in use in an extremely tortuous canal



X-Plorer files greatly help in executing a reproducible glide path in complicated anatomy

Dentistry and photography courtesy of Dr. Yosef Nahmias



X-PLORER ROTARY FILE 6-PACK

- 15/.01 25mm
- 15/.01 21mm
- 20/.01 21mm
- 20/.02 21mm
- 20/.01 25mm
- 20/.02 25mm
- 25/.02 21mm
- 25/.02 25mm

ASSORTED (2 EACH)

21mm 15/.01, 20/.01, 20/.02

ASSORTED (2 EACH)

25mm 15/.01, 20/.01, 20/.02

X-PLORER HAND FILE 6-PACK

- 15/.01 25mm
- 15/.01 21mm

Instigator

Typhoon™ Orifice Opener

Designed using revolutionary CM technology, and featuring a triangular cross section and a 12mm cutting flute, the **Instigator 25/.08 Orifice Opener File** beautifully and efficiently shapes and enlarges the coronal area of the root canal. **Instigator** files can be used in place of Gates Glidden drill and are available in a 21mm length.



.08 INSTIGATOR ORIFICE OPENER FILE
25/.08 21mm