

**HyFlex®** Rotary Files



# COLTENE Covers the Entire Endo Procedure

COLTENE offers a complete line of endodontic products for the root canal procedure, from diagnosis through restoration.

**Visit coltene.com/products/endodontics** to view the entire endo line.

# The HyFlex Story

In 2011, COLTENE developed a method for modifying the properties of NiTi, giving endodontic rotary files a true shape memory which allowed exceptional precision. Using HyFlex CM rotary files, clinicians could prepare even severely curved canals safely and confidently without fear of unexpected instrument separation. The tension-free behavior of this generation of Controlled Memory files set a new standard in the industry, as previously it was not possible to bend NiTi files by hand.

The HyFlex EDM files represent the 5th generation of root canal files. HyFlex EDM NiTi files have completely new properties due to their innovative manufacturing process using electrical discharge machining, a spark erosion process that generates a unique, hardened surface which improves cutting efficiency even further.

Modular HyFlex NiTi systems enable working with confidence in virtually every clinical case. Depending on the anatomy, the clinician can choose between fast instrumentation with only a few files and highly precise canal shaping with a combination of different HyFlex rotary files.

# HyFlex® EDM OneFile







# HyFlex® EDM

## Unmatched Flexibility and Fracture Resistance in a One File System

HyFlex EDM offers the dental practitioner enhanced ease of mechanical preparation of the root canal so that even newcomers to endodontics can achieve reliable results quickly and easily.



### **Extreme Fracture Resistance**

HyFlex EDM files are produced using an innovative manufacturing process called Electrical Discharge Machining. The EDM process results in a file that is extremely flexible and fracture resistant. In fact, HyFlex EDM files are up to 700% more resistant to cyclic fatigue compared to traditional NiTi files.\*



### **Controlled Memory**

Thanks to controlled memory properties, HyFlex EDM files follow the anatomy of the canal, which can significantly reduce the risk of ledging, transportation and perforation.



### **Fewer Files Required**

The combination of flexibility, fracture resistance and cutting efficiency of the HyFlex EDM makes it possible to reduce the number of files required for cleaning while preserving anatomy.



### Pre-Sterilized, Modular System

Provided as a modular system of sterile instruments, HyFlex EDM includes Shaping, Glide Path, OneFile, Orifice Opener and Finishing files and may be used in combination with HyFlex CM files.

\*Int Endod J. 2015 May 22. doi: 10.1111/iej.12470

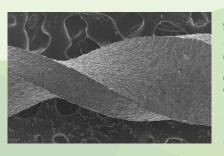
### **Testimonials**

66 I did a case with 3 EDM files and absolutely loved them! I cut through that curved anatomy like butter...
No unwinding noted at all. Sam Alborz, DDS, CAGS

The file remains centered and does not feel like the apical portion is "whipping" or "clicking"...This eases your mind when navigating complex anatomy and dilacerations. Marcus Johnson, DDS, MSD

# Electrical Discharge Machining

The HyFlex EDM owes its unique properties to a breakthrough technology called "Electrical Discharge Machining". This innovative manufacturing process uses spark erosion to harden the surface of the NiTi file, resulting in superior fracture resistance and improved cutting efficiency. Just like HyFlex CM files, HyFlex EDM files offer trusted controlled memory effect and regenerative properties.



mage courtesy Dr. Chiara Pirani and D rancesco lacono, University of Bologr

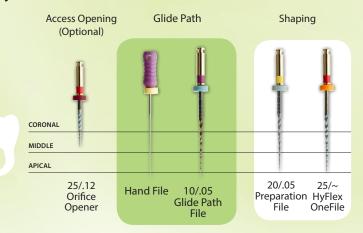
## Fewer Files Required for Canal Preparation

### **HyFlex EDM for Straight Canals**



Depending on the clinical situation, use of HyFlex EDM files reduces the number of files required to 2 or 3 instruments, particularly in straight and larger canals.

### **HyFlex EDM for Curved Canals**



A combination of HyFlex EDM OneFile and Preparation File is recommended for canals with medium curvature (400 rpm; 2.5 Ncm (25 mNm).



All HyFlex EDM Files can be used at 400 rpm and at a torque of up to 2.5 Ncm (25 mNm) except the Glidepath files, which can be used with 300 rpm and at a torque of up to 1.8 Ncm (18 mNm).

\*OneFile (25/~) is constructed with a variable taper

## Regeneration by Thermal Treatment

The built-in shape memory of HyFlex EDM files prevents stress during canal preparation by changing their spiral shape. A normal autoclaving process\*\* is enough to return the files to their original shape and fatigue resistance. Should the file fail to regain its shape after heat treatment, risk of fracture is increased, and the file should not be used after visual inspection.

Before use

After use

After heat treatment

<sup>\*\*</sup>Follow manufacturer's recommended settings







### Order Information

	Catalog Numbe	er	Description
15 mm	15 mm 21 mm 25 mm		
60019630			25/.12 Orifice Opener
	60022281	60019628	10/.05 Glidepath File
	60022287	60022286	20/.05 Preparation File
	60022282	60019629	25/~ OneFile
	60022283	60019631	40/.04 Finishing File
	60022284	60019632	50/.03 Finishing File
	60022285	60019633	60/.02 Finishing File
	60022279	60019641	Shaping Set - Simple 25/.12, 10/.05, 25/~ One File
	60022288	60022289	Shaping Set - Medium 10/.05, 20/.05, 25/~ One File
	60022280	60019642	Finishing Set 40/.04, 50/.03, 60/.02



Sets include 3 instruments per package

Catalog Number	Description
60021895	HyFlexEDM IntroKit Compact*
(1 each) 25/.12, 10/.05, 25/~, 40/.04, 50/.03, 60/.02, HyFlex EDM Gutta Percha	
Assortment, HyFlex Organizer	

<sup>\*</sup>Available only in the United States

Catalog Number	Matching GuttaPercha
Length ≥ 28 mm	
60019771	GuttaPercha SpectraPoints OneFile
60022563	GuttaPercha SpectraPoints 0.05 #20
H08763	GuttaPercha SpectraPoints 0.04 #40
60019770	GuttaPercha SpectraPoints 0.03 #50
H08748	GuttaPercha SpectraPoints 0.02 #60
60021864	GuttaPercha Assortment (25/~, 40/.04, 50/.03, 60/.02)



### **HyFlex EDM Accessories**

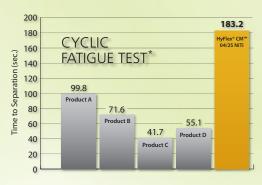
Catalog Number	Description
60018783	HyFlex File Organizer

# HyFlex CM<sup>®</sup> controlled memory niti files



### 300% More Resistance to Separation

HyFlex CM NiTi files with Controlled Memory are up to 300% more resistant to cyclical fatigue compared to other NiTi files\* which substantially helps reduce the incidence of file separation.



<sup>\*</sup> Source: In-house tests, at 300 rpm simulated 30 degree root canal



### No Rebound + Extreme Flexibility = Superior Canal Tracking

HyFlex Controlled Memory NiTi files have been manufactured utilizing a unique process that controls the material's memory, making the files extremely flexible, but without the shape memory of other NiTi files. This gives the file the ability to follow the anatomy of the canal very closely, reducing the risk of ledging, transportation or perforation.









### **Regains Shape After Sterilization**

The shape and strength of files with straightened spirals can be restored during autoclaving and reused. Files not returning to original shape should be discarded.





after heat treatment

### What clinicians are saying...





Dr. Santiago Frajlich Buenos Aires, Argentina



Dr. Rajesh Iyer Maharashtra, India



Dr. Sam Alborz Knoxville, TN



Dr. David Uroz Torres Almería, Spain

### Use your technique or try ours

HyFlex CM files can be used with crown-down, step-back or our recommended single length technique.



### **Testimonials**

I find them easy to use especially in limited access areas because you can bend them. With their greater flexibility, the files are not as stressed when working in the canals. It is also nice that you do get some advanced warning that you are over stressing the files when you see it unwind some. I have not had any of these files separate and I will continue to use them. **Dr. Alan Swett , Johnston, IA** 



The transition from Tulsa greater taper files to HyFlex CM was seamless and easy.

Dr. Timothy Kneller, Aurora, CO



Most flexible NiTi I've ever seen. Now that I'm getting used to them, I like them and could see adopting these as our primary instruments. **Dr. Gary Henkel, Philadelphia, PA** 

Since you introduced the HyFlex file to me, I can honestly say that I am truly confident in attacking 'ANY' curved canal I see without any fear of separation. I find that through the flexibility and superior tracking of the canal, the whole Root Canal procedure speeds up; thus allowing me to schedule more patients. Lalso am equally impressed with how beautifully the spectra points fit to the 'Mark' on the first time, and thus, also saves me crucial time. **Dr. Joseph Braud, New Iberia, LA** 





### Order Information

Catalog Number				Description	Package Size
19 mm	21 mm	25 mm	31 mm		6 files
H8190825				.08/25	6 files
\	H8210415	H8250415	H8310415	.04/15	6 files
	H8210420	H8250420	H8310420	.04/20	6 files
	H8210425	H8250425	H8310425	.04/25	6 files
	H8210430	H8250430	H8310430	.04/30	6 files
	H8210435	H8250435	H8310435	.04/35	6 files
	H8210440	H8250440	H8310440	.04/40	6 files
	H8210445	H8250445	H8310445	.04/45	6 files
	H8210450	H8250450	H8310450	.04/50	6 files
\	H8210460	H8250460	H8310460	.04/60	6 files
	H8210620	H8250620	H8310620	.06/20	6 files
	60018441	60018443		.06/20, X-tra sprials	6 files
	H8210625	H8250625	H8310625	.06/25	6 files
	60018442	60018444		.06/25, X-tra sprials	6 files
	H8210630	H8250630	H8310630	.06/30	6 files
	H8210635	H8250635	H8310635	.06/35	6 files
	H8210640	H8250640	H8310640	.06/40	6 files
	H821ASST	H825ASST	60018460	.08/25, .04/20, .04/25, .06/20, .04/30, .04/40	1 of each
	H821SML	H825SML	H831SML	.08/25, .04/35, .04/30, .04/25, .04/20, .04/15	1 of each
	H821MED	H825MED	H831MED	.08/25, .04/60, .04/50, .04/45, .04/40, .04/35	1 of each
	H821LRG	H825LRG	H831LRG	.08/25, .06/40, .06/35, .06/30, .06/25, .06/20	1 of each

Catalog Number	Description	Package Size
H8INTROKIT	HyFlex CM File IntroKit 6 Rotary File Asst. Packs (2–21 mm, 4–25 mm); 1 pack SpectraPoint® GT Gutta-Percha Points, 1 Endo Procedure Block, 3 Endo File Practice Blocks, CD, Step by Step Card	
H8101	Endo Practice Block Pack	3 acrylic blocks
H8102	Endo Procedure Block	1 each









An established glide path can reduce torsional stress and increase the lifespan of the rotary instrument used for canal preparation, decrease chance for transportation and ledging that often occurs with hand instrumentation, lessen hand fatique and save valuable chair time. HyFlex GPF will permit the clinician to negotiate working length quickly and efficiently. The HyFlex GPF Controlled Memory Files track well in the apical third and allow safer, more efficient preparations. They are available in 21, 25 and 31 mm lengths.

#### Order Information

Catalog Number			Description	Package Size
21 mm	25 mm	31 mm		
HGPF8211501	HGPF8251501	HGPF8311501	Navigator NT File 15/.01 10 mm flute	6 files
HGPF8211502	HGPF8251502	HGPF8311502	CM K File 15/.02 16 mm flute*	6 files
HGPF8212002	HGPF8252002	HGPF8312002	CM K File 20/.02 16 mm flute*	6 files
HGPF821ASST	HGPF825ASST	HGPF831ASST	GPF Navigtor NT 15/.01, CM K File 15/.02, CM K File 20/.02	2 of each

\* Controlled Memory NiTi files





HyFlex NT endodontic rotary NiTi file is designed to work in specific clinical situations, such as calcified canals, straight canals, retreatments and removing Gutta-Percha. HyFlex NT files are available in .06 and .04 tapers in 21 mm and 25 mm.

#### Order Information

	<b>Catalog Number</b>	er	Description	Package Size
19 mm	21 mm	25 mm		6 files
HNT8190825			.08/25	6 files
	HNT8210415	HNT8250415	.04/15	6 files
	HNT8210420	HNT8250420	.04/20	6 files
	HNT8210425	HNT8250425	.04/25	6 files
	HNT8210430	HNT8250430	.04/30	6 files
	HNT8210435	HNT8250435	.04/35	6 files
	HNT8210440	HNT8250440	.04/40	6 files
	HNT8210445	HNT8250445	.04/45	6 files
	HNT8210450	HNT8250450	.04/50	6 files
	HNT8210460	HNT8250460	.04/60	6 files
	HNT8210620	HNT8250620	.06/20	6 files
	HNT8210625	HNT8250625	.06/25	6 files
	HNT8210630	HNT8250630	.06/30	6 files
	HNT8210635	HNT8250635	.06/35	6 files
	HNT8210640	HNT8250640	.06/40	6 files
	HNT821SML	HNT825SML	.08/25, .04/35, .04/30, .04/25, .04/20, .04/15	1 of each
	HNT821MED	HNT825MED	.08/25, .04/60, .04/50, .04/45, .04/40, .04/35	1 of each
	HNT821LRG	HNT825LRG	.08/25, .06/40, .06/35, .06/30, .06/25, .06/20	1 of each





# CanalPro® Apex Locator

The CanalPro Apex Locator is characterized by its brilliant, colored 3D panel and its accuracy of measurement. The ergonomic design and the easy operation allow comfortable use.

- Accuracy of measurement
- User-friendly, intelligent interface
- Virtual Apex Function
- Built-in self-test for a fast function control

Catalog Number	Description
60018737	CanalPro Apex Locator Measuring cable, 2 file clips, 1 touch probe, 5 lip clips,
	AC adapter, rechargeable battery

## CanalPro® CL

### Cordless Handpiece

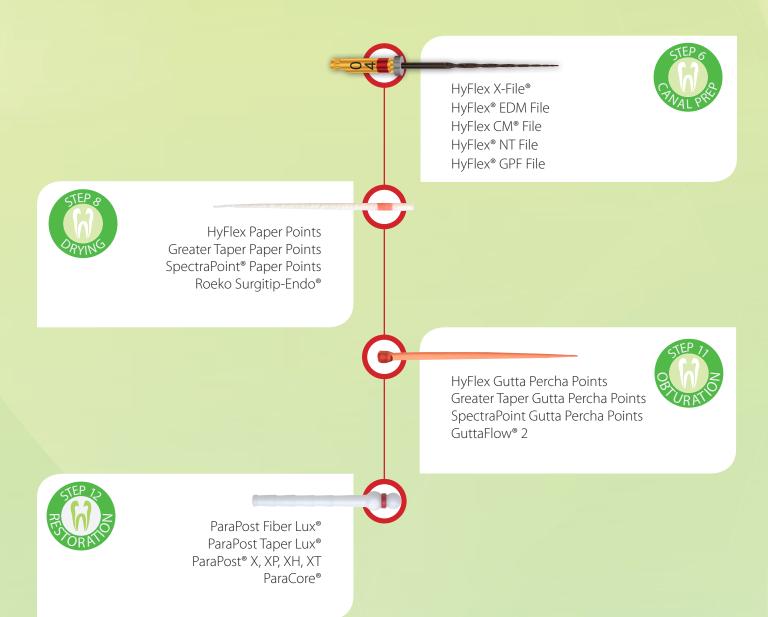
- Thin ergonomic design for better access to hard to reach areas
- · Large, user-friendly LCD panel
- Memory for up to 5 programs
- 6 contra angle head positions
- Operates continuously for approx. 80 minutes at rated load
- Energy-saving, turns off when not used for 10 minutes
- Contra angle head is autoclavable at 135°C
- Rotation Speed (min-1): 140 ~ 550, Torque Level (N·cm): 0.3 ~ 3.0

Catalog Number	Description
H8CPCLINTRO	CanalProCL Complete Set CanalPro CL motor handpiece, CanalPro CL contra angle 16:1, CanalPro CL charger





### From start to finish COLTENE has you covered with color-coordinated matching sizes and tapers



For a complete selection of COLTENE endodontic products, visit coltene.com

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