



**HyFlex<sup>®</sup>** EDM: Stays on Track

**/// COLTENE**



# 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](http://coltene.com/products/endodontics) to view the entire endo line.

## HyFlex<sup>®</sup> 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.



#### Stays on Track

- 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.



#### 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.\*



#### 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

# HyFlex EDM OneFile at a Glance

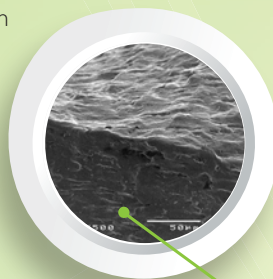


Pre-Sterile



## Unmatched Fracture Resistance

Uniquely hardened surface reduces risk of file separation



## Variable Cross Section Design

Contributes to high breakage resistance



Almost triangular cross section at top



## Cutting Efficiency

Hardened surface plus controlled memory improves cutting efficiency



## Extremely Flexible

Controlled memory allows superior canal tracking



Trapezoidal cross section in middle



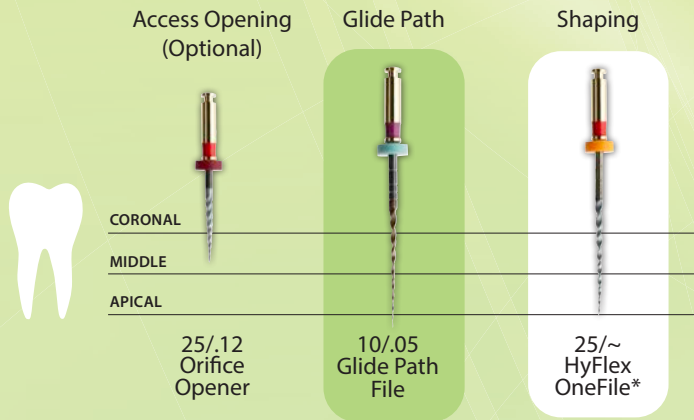
Quadratic cross section at tip



Visit COLTENE's YouTube channel for more information about the HyFlex EDM and EDM technology.

# Fewer Files Required for Canal Preparation

## Simple Canals



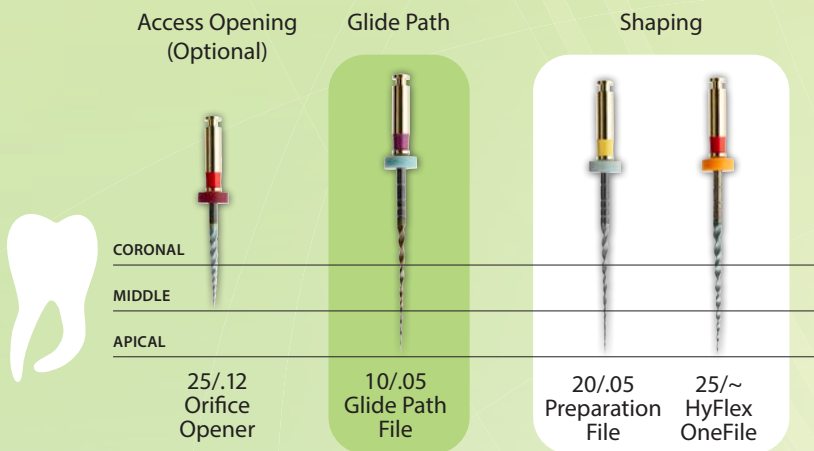
## Regeneration by Thermal Treatment

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.

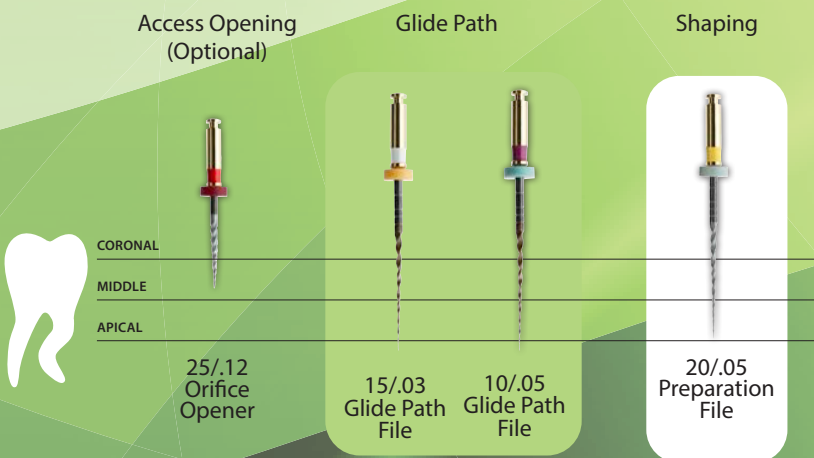


\*\*Follow manufacturer's recommended settings

## Medium Canals



## Max Curve Canals



Finishing files are available if case requires

# HyFlex EDM Electrical Discharge Machining

- Up to 700% higher fracture resistance\*
- Uniquely hardened surface
- Less filing required for treatment success

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.

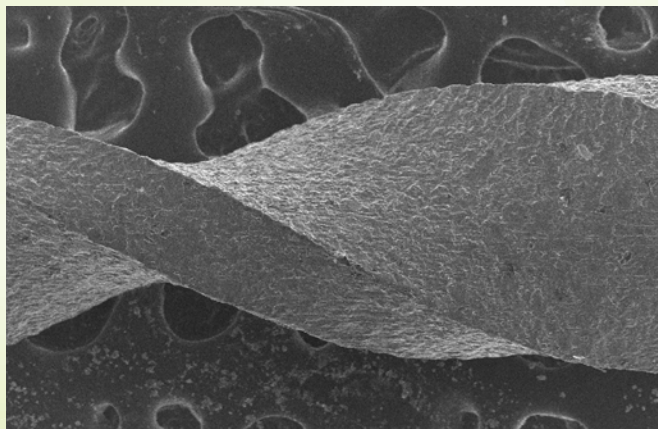
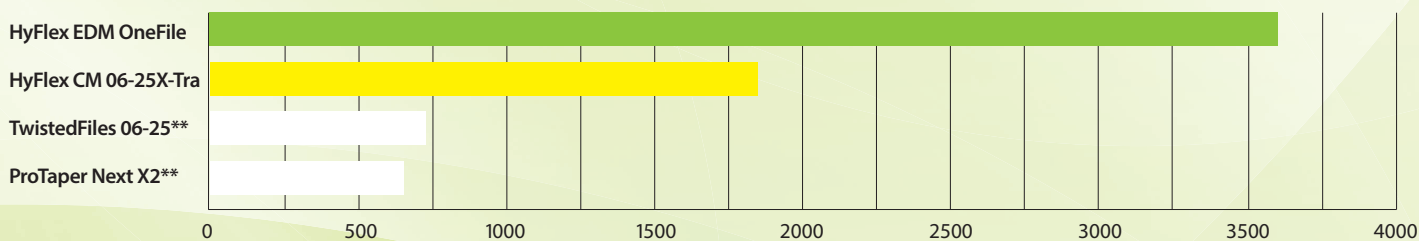


Image courtesy Dr. Chiara Pirani and Dr. Francesco Iacono, University of Bologna

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

Average value measured at 60° curvature with 9 mm radial length

Number of cycles to failure



Source: Internal Tests/ \*\*not a trademark of COLTENE

## Praise for HyFlex EDM Files

“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

## Research Support for HyFlex EDM Files

“Within the limitations of the present in vitro study, it was found that cyclic fatigue resistance of HyFlex EDM files was higher than the cyclic fatigue resistances of OneShape, Reciproc Blue, and WaveOne Gold files.

— Mustafa Gündoğar, DDS, PhD,  
and Taba Özyürek, DDA, PhD,  
J Endo 2017;;1-5



## HyFlex EDM Order Information

Catalog Number			Description
15mm	21mm	25mm	
60019630			25/.12 Orifice Opener
	60023574	60023573	15/.03 Glidepath File
	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
	60023576	60023575	Shaping Set - Max Curve 15/.03, 10/.05, 20/.05
	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	

\*Available only in the United States



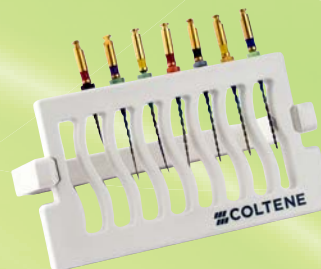
Size / taper	Adhesive-free paper points 100 pcs	Latex-free Guttapercha points 60 pcs
20/.05	60022742	60022706
OneFile 25/~	60022743	60022707
40/.04	60022676	60022708
50/.03	60022741	60022709
60/.02	60022740	60022710
Assortment 20/.05 - 60/.02	60022744	60022705

## HyFlex EDM Accessories

Catalog Number	Description
60018783	HyFlex File Organizer
H8CPCLINTRO	CanalPro Cordless Handpiece

## Sealers and Obturation

Catalog Number	Description
60013701	GuttaFlow 2 Automix Standard Set



**Coltène/Whaledent Inc.**  
235 Ascot Parkway  
Cuyahoga Falls, OH 44223 / USA  
Tel. USA & Canada +1 800 221 3046  
+1 330 916 8800  
Fax +1 330 645 8704  
info.us@coltene.com  
© 2018 Coltène/Whaledent Inc.

**Coltène/Whaledent AG**  
Feldwiesenstrasse 20  
9450 Altstätten / Switzerland  
Tel. +41 (0)71 757 53 00  
Fax +41 (0)71 757 53 01  
info.ch@coltene.com

**Coltène/Whaledent GmbH + Co. KG**  
Raiffeisenstrasse 30  
89129 Langenau / Germany  
Tel. +49 (0)7345 805 0  
Fax +49 (0)7345 805 201  
info.de@coltene.com



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coltene.com