

**HyFlex**® EDM: Stays on Track



# 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.



### **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.



#### **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.\*



# **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, Glidepath, OneFile, Orifice Opener and Finishing files and may be used in combination with HyFlex CM files.

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 Trapezoidal cross section in middle **Extremely Flexible** Controlled memory allows superior canal tracking 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**

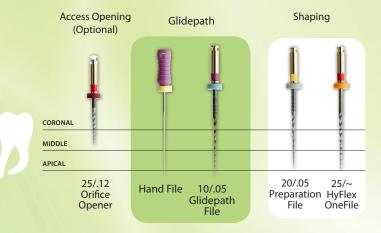
All Sizes Now Available in **21mm** and **25mm** lengths!

#### **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.

After heat treatment

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

# **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.

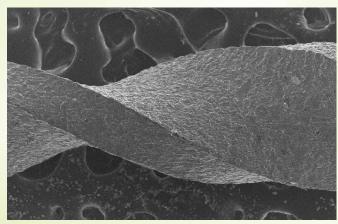
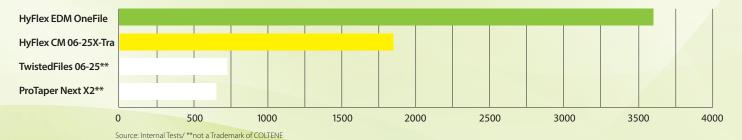


Image courtesy Dr. Chiara Pirani and Dr. Francesco Iacono, University of Bologna

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

#### Number of cycles to failure



# **Praise for HyFlex EDM Files**

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

#### **HyFlex EDM Order Information**

(	Catalog Numbe	r	Description
15mm	21mm	25mm	
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
·.E	60022288	60022289	Shaping Set - Medium 10/.05, 20/.05, 25/~ One File
	60022280	60019642	Finishing Set 40/.04, 50/.03, 60/.02

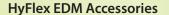


Sets include 3 instruments per package

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 ≥ 28mm			
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)		



Catalog Number	Description
60018783	HyFlex File Organizer
H8CPCLINTRO	CanalPro Cordless Handpiece

#### **Sealers and Obturation**

Catalog Number			Description	
6001370	9		GuttaFlow 2 Automix Standard Set	







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