

# Unlock Endo's 4th Dimension

Redefining procedure duration  
with anatomical precision.

**4D Workflow**

# The 4D Workflow: A streamlined approach for anatomically predictable results.

Clinicians often face a difficult balance: achieving consistent clinical outcomes while managing limited time and complex procedures. Traditional methods involve compromises — fast procedures may sacrifice precision, while accurate results typically require more time, steps, and handling.

The **4D Workflow** changes that.

By combining the four fundamental pillars of endodontics into **one seamless**, intuitive process through **four key products**, the 4D Workflow makes it possible to achieve clinical outcomes — quickly, predictably, and with confidence.

Shaping

## XP-4D®

streamlines the shaping phase with a minimal number of files designed to adapt to the canal anatomy, delivering anatomically predictable results.



Equipment

## Rooter® X4000

simplifies setup and operation with one-touch presets, and intuitive navigation via a large, high-resolution touch screen.



Irrigation

## Dual Rinse® HEDP

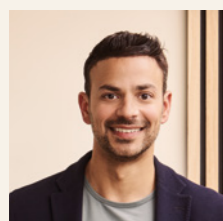
combines chelation and disinfection in a single solution, optimizing handling and saving time.



Obturation

## TotalFill®

offers a pre-mixed bioceramic sealer for a single-cone technique, allowing fast, effective obturation with a durable seal.



"From start to finish, [the 4D Workflow is] built around three essential goals: simplicity, efficiency, and predictability."

Dr. Adham Azim  
DDS, BDS / San Francisco, USA

The 4D Workflow **reimagines** endodontic procedures — from initial access to final sealing — by delivering a fluid, streamlined, and **efficient** process with anatomically **predictable results**.



The 4D Workflow brings together the four pillars of modern endodontics—shaping, equipment, irrigation, and obturation—into one streamlined system. It simplifies every step, shortens procedure time, and delivers consistent, anatomically accurate results with confidence and ease.



Find a partner:



## From complexity to simplicity

"The new 4D Workflow is truly a game changer. From start to finish, it's built around three essential goals: simplicity, efficiency, and predictability.

The motor streamlines the process, with simple one step presets. The new file system is incredibly efficient, by reducing the number of files needed, as well as coming matched with Bio Gutta Percha cones and paper points. Then there's irrigation—which has never been easier—with one treatment being all you need.

And with the bioceramic sealer, obturation is straightforward and reliable. Every component is designed to work seamlessly together, and the result is a workflow that saves time, reduces stress, and delivers consistent outcomes. I'm so happy I made the change."

Dr. Adham Azim  
DDS, BDS / San Francisco, USA



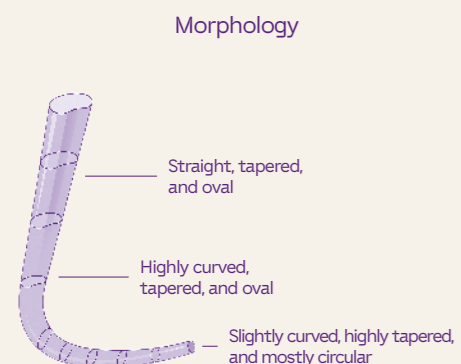
## Shaping

# XP-4D®

XP-4D simplifies multi-step sequences, providing anatomically predictable shaping that seamlessly adapts to each case, optimizing efficiency with matching Bio Gutta Percha Cones and Absorbent Paper Points.

### Smart Anatomical Shape

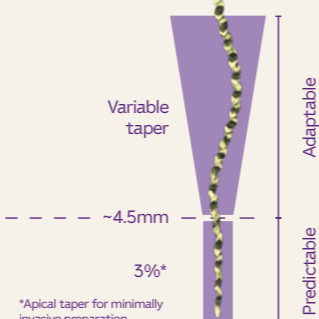
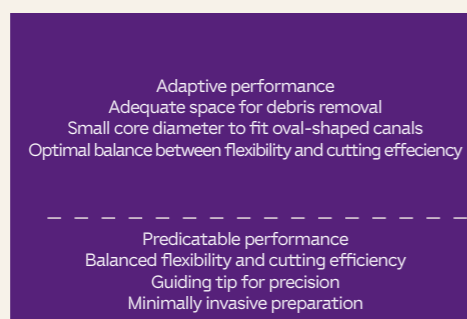
XP-4D was designed to adapt to the complexities of root canal anatomy—gently creating space in the coronal third, gliding smoothly through the middle third, and ensuring predictable shaping in the apical third. This intentional design enhances clinical outcomes by improving predictability and minimizing invasiveness.



Morphology

Requirements

Solution



### Anatomically Centered Endo

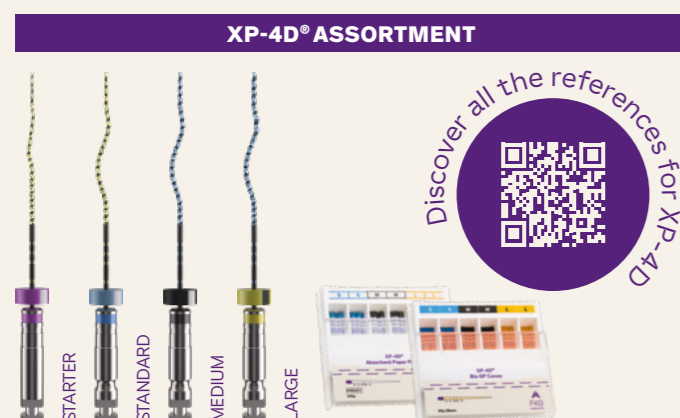
XP-4D addresses the limitations of traditional NiTi instrumentation and elevates the existing biological standard for endodontic care. Unlike conventional NiTi files that create only round shapes, XP-4D is designed to respect the natural anatomy of the canals by adapting to it, applying minimal stress to both the instrument and the dentin, and requiring low torque.

### Optimized Heat Treatment

We have applied not just a single heat treatment, but several—each tailored to the specific clinical purpose of every instrument in the range. This multi-treatment approach, visibly identifiable by the distinctive coloration of the instrument's working part, is our response to the promise of navigating canal complexities—ensuring each instrument adapts to anatomical challenges while delivering consistent efficiency during endodontic procedures.

### Obturation System

No need to search, no need to overthink: XP-4D Bio Gutta Percha Cones and Absorbent Paper Points are specifically designed and adapted for the obturation step following the XP-4D shaping system, providing a ready-to-use solution for precise and seamless obturation.



Find out more about XP-4D®:



## Equipment

# Router X4000®

The Router X4000 endomotor's intuitive design streamlines setup and procedures with one-touch presets, adaptive torque control, and wireless freedom—delivering precise results and ensuring smooth, uninterrupted performance.

### Cordless Freedom, Reliable Control

Our new tabletop cordless endomotor eliminates the need for traditional cords, offering a reliable wireless connection between the motor and control unit. This provides clinicians with greater freedom of movement and optimized handpiece balance for enhanced control and comfort. The detachable, continuously-charged handpiece support can be positioned closer to the patient when needed, ensuring flexibility and efficiency during procedures.

### Fastest Router

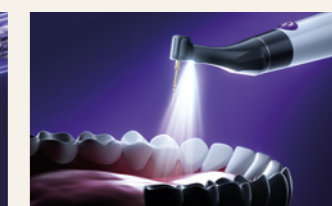
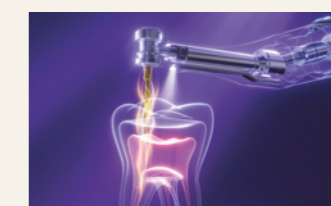
Thanks to its high-quality brushless design, this motor reaches speeds of up to 4,000 rpm. This improves stability and responsiveness through outstanding performance.

### Intuitive Touch Interface

The large touchscreen simplifies operation, providing clear readings before and during use, while allowing effortless program selection. One-touch presets save your time, while a clean, intuitive interface keeps navigation fast and stress-free—reducing mental load and allowing for quick adjustments.

### Integrated Precision Length Control

The built-in apex locator ensures safer, more efficient treatments by displaying real-time file location. The Router X4000 automatically stops or reverses once the apical stop is reached, for a seamless experience.



### Customizable Files & Sequences

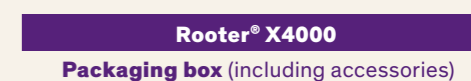
The Router X4000's software allows you to customize file settings and create your own work sequences, with multiple memory presets tailored to your specific needs.

### Future-proof Your Motor

The Router X4000 software allows for system updates, so there's no need for a new motor when new FKG systems are released—just update the software and you're good to go.

### Optimized Visibility with Integrated LED

The 360° contra-angle of the Router X4000 features a built-in LED light, which can be activated or deactivated based on your preference, ensuring superior visibility during endodontic treatments.



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Find out more about the Router® X4000:





## Irrigation

# Dual Rinse<sup>®</sup> HEDP

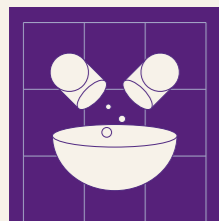
Dual Rinse HEDP ensures continuous chelation and disinfection during shaping, maintaining a smooth, consistent, and highly efficient workflow. With all functions concentrated in a single product, handling is optimized for greater simplicity and ease.

### All-in-one Irrigation Solution

Simplify continuous irrigation, effectively removing debris and the smear layer without requiring additional EDTA or intermediate rinsing with water. Enhance adhesion to the root dentin for more effective root canal treatment.

### Effortless Application

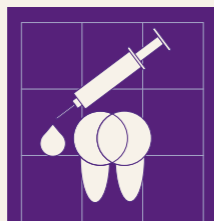
Simply mix the powder with NaOCl, stir, and use immediately in your syringe for quick, easy irrigation and activation during root canal procedures.



Add



Stir



Apply



### Reduces Shaping Time


By significantly reducing working time through its unique simultaneous chelation, Dual Rinse HEDP simplifies the irrigation phase, boosting instrumentation efficiency.

### Reduces Stress on Files

Lowering torsional load during shaping, Dual Rinse HEDP helps protect rotary instruments, optimizing both safety and efficiency throughout the procedure.

### Proven Capability

A scientifically proven soft chelator and compatible with NaOCl ensures reliable performance.

Dual Rinse <sup>®</sup> HEDP		
Cap jar		
	10 capsules	08.660.00.001.FK
	30 capsules	08.660.00.002.FK
	100 capsules	08.660.00.003.FK

Find out more about Dual Rinse<sup>®</sup> HEDP:



## Obturation

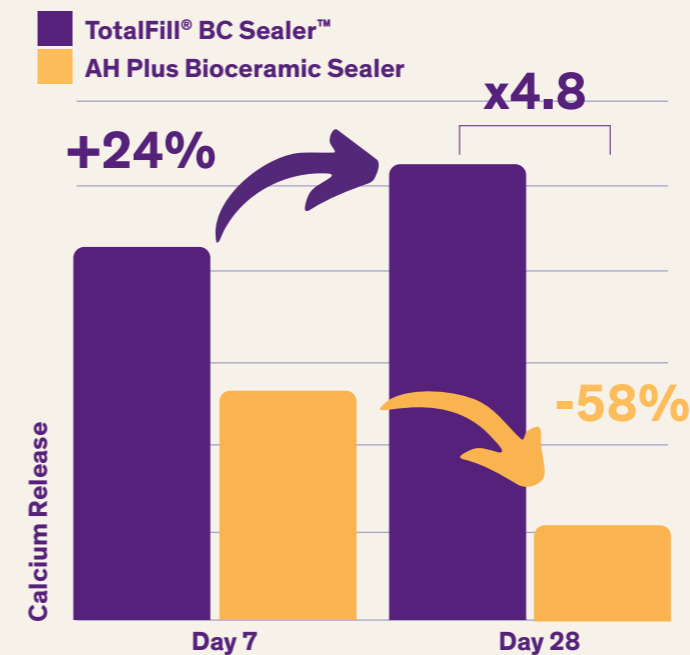
# TotalFill<sup>®</sup>

TotalFill, with its pre-mixed bioceramic sealer and single-cone technique, completes obturation quickly while ensuring a durable seal and providing clinical confidence.


### Clinical Evidence

TotalFill is a trusted obturation system, proven by over 120 independent studies with strong clinical results. Its bioceramic technology provides excellent sealing, with zero adverse events reported in the FDA MAUDE database.

New research by Professor Josette Camilleri and Dr. Veksina Raman was published in the Journal of Endodontics.\*



\* Raman V, Camilleri J. Characterization and assessment of physical properties of three single syringe hydraulic cement-based sealers, Journal of Endodontics (2024), doi: <https://doi.org/10.1016/j.joen.2024.01.001>

TotalFill <sup>®</sup> BC Sealer™		
	Syringe 2g	08.650.00.007.XX
	+ 15 TotalFill BC Tips	

Find out more about TotalFill<sup>®</sup>:



### 3 key findings from this research:

1

Up to 4.8x superior calcium release for TotalFill BC Sealer vs. AH Plus Bioceramic Sealer.<sup>1</sup>

2

AH Plus Bioceramic Sealer disintegrated in immersion solution after 7 days.<sup>2</sup>

3

AH Plus Bioceramic Sealer leached Lithium.<sup>3</sup>

1. TotalFill BC Sealer released 24% more Calcium at day 28 vs. day 7. AH Plus Bioceramic Sealer released 58% less Calcium at day 28 vs. day 7. TotalFill BC Sealer released 4.8x more Calcium vs. AH Plus Bioceramic Sealer at day 28.

2. This is due to the lower percentage (5%-15%) of calcium silicate in AH Plus Bioceramic Sealer. TotalFill BC Sealer contains up to 50% calcium silicate and 4% of calcium hydroxide.

3. Due to its unique composition, TotalFill BC Sealer has demonstrated its safety and efficacy in more than 80 publications.

Find out more about TotalFill<sup>®</sup>:



# FAQs:

## 1. How is the 4D Workflow different from traditional endodontic techniques?

The 4D Workflow replaces complex, fragmented protocols with a set of products that work in harmony across all treatment phases. This integration reduces handling, simplifies the process, and saves time—while ensuring effective shaping, cleaning, and sealing.

## 2. Can the 4D Workflow be used on all types of cases, including complex anatomies?

Yes. The system is designed to adapt to natural canal anatomy, even in challenging or curved canals. The shaping files and irrigation solutions work together to respect the tooth's structure, delivering predictable results across a wide range of cases.

## 3. Does adopting the 4D Workflow require new training or equipment?

Minimal training is needed—most clinicians can integrate the workflow quickly thanks to its intuitive design and simplified steps. The system uses familiar tools like the Rooter X4000 endomotor and matching obturation materials, so transitioning is easy and efficient.

## 4. How does the 4D Workflow improve efficiency without compromising treatment quality?

The 4D Workflow reduces the number of handling steps throughout the treatment by integrating a fully harmonized ensemble of products—XP-4D shaping system, Rooter X4000, Dual Rinse HEDP, and TotalFill. Each product delivers strong individual value at its own stage of the procedure, collectively enabling a more streamlined process that maintains a high level of clinical performance from shaping to obturation.

# Innovation in the Heart of the Swiss microtech valley

Since 1931, in the heart of the Swiss microtech valley, we have been pushing the limits of endodontics by combining technology and innovation.

Our mission is to provide solutions that respect the complex anatomy of teeth while improving the treatment efficiency. With game-changers such as XP-endo Rise, RACE EVO, R-Motion, Finisher and TotalFill, we have transformed how endodontics is practiced, giving clinicians better tools to meet challenges with confidence.

# Empower Endo



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## Welcome to the heart of the Swiss microtech valley.

For nearly a century, we have been constantly re-inventing and challenging what we thought we knew.

We strive to create innovations for new ways of working: more respectful, more efficient, more agile, more ergonomic, and safer—serving new generations, promoting new visions of life, for us, for you, and for patients.

We embrace change that empowers endo.

FKG | Change the game.

Enter our game-  
changing universe



Check out  
our website



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