

EXACTECH | **KNEE**  
*Performance over time.*



OPTETRAK<sup>®</sup>  
**LOGIC**

Comprehensive Knee System

# Performance Over Time.





It has often been said that the overall longevity of a total knee implant is attributed to the combination of excellent design and materials.

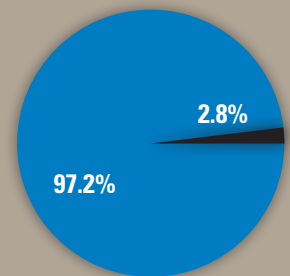
The **Exactech Comprehensive Knee System** offers a platform of implants, instruments and technology for partial, primary and revision total knee replacement. With a design developing for more than four decades and excellent clinical and laboratory results, surgeons can have confidence in a knee system that continues to demonstrate *performance over time*.<sup>1</sup>

### Clinical Outcomes

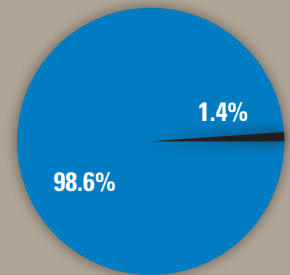
Surgeons around the world continue to document excellent long-term clinical results<sup>2-4</sup> with the Optetrak<sup>®</sup> family of products.

### Clinical Lineage

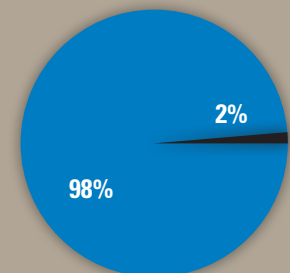
The advancements in each successive design have been driven by the goal of improving clinical outcomes, all while maintaining the patented design and proprietary materials that have been proven over the years.<sup>1</sup>




Geoffrey H. Westrich, MD  
Average 7-year follow-up



Ivan A. Gradisar, MD  
Average 8.5-year follow-up



Raymond P. Robinson, MD  
Average 11.5-year follow-up

  
Reoperative Rate



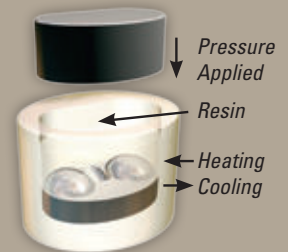
# Proprietary Materials.



Exactech's proprietary net compression molded polyethylene inserts are designed to minimize surface damage and wear, and ultimately improve the longevity of the knee prosthesis.

**Consistent Consolidation**

Exactech's proprietary net compression molding process is proven to yield consistent consolidation, resulting in uniform material properties, smooth articular surface and oxidation resistance.



**Uniform consolidation that is free of voids forms natural resistance to oxidation.**

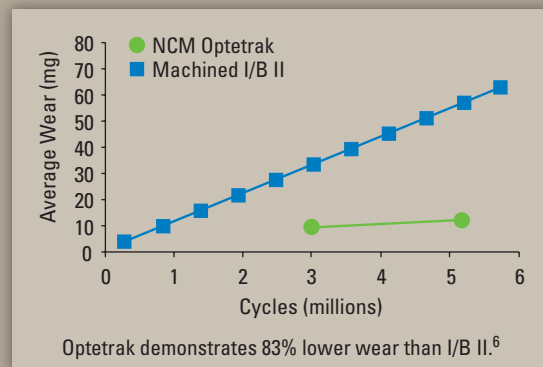
**Superior Wear Characteristics**

Extensive testing and clinical results demonstrate Exactech's polyethylene excellent wear characteristics without requiring the need for post-consolidation treatments.<sup>5,6</sup> Optetrak has documented volumetric wear of 1.46 mg/MC, which is approximately six times less wear than the preceding design.<sup>6</sup>

**Fracture Toughness**

The NCM inserts maintain oxidation resistance and fracture toughness by being sterilized in a vacuum package with a low dose of gamma irradiation (2.5-4 Mrad).

**Optetrak demonstrates lower wear compared to the earlier design.**



# Patented Design.





Building on a clinically recognized knee lineage, Exactech Knee has continued to evolve while maintaining its proven design principles.<sup>4</sup>

### **Minimized Contact Stress**

Exactech maintains a femoral-tibial congruency ratio of 0.96,<sup>7</sup> which reduces contact stresses and lowers the potential for surface damage and wear, ultimately improving the longevity of the prosthesis.



The implant system offers improved congruency and patella tracking.

### **Enhanced Patella Tracking**

Exactech's patella and femoral components are designed to allow natural patella tracking during flexion and extension resulting in reduced contact stress, patella dislocation, patella clunk and retinacular strain.<sup>8-10</sup>

### **Tibial Tray Locking Mechanism**

The system's tibial components are designed to minimize backside wear and component disassociation while providing the flexibility to optimize tibial bone coverage and balance flexion and extension gaps.

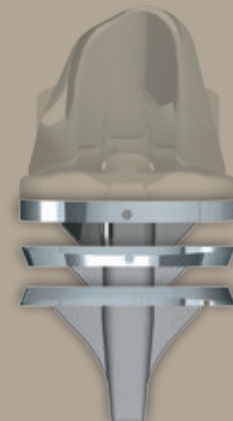


Tibial locking mechanism reduces insert motion and disassociation.

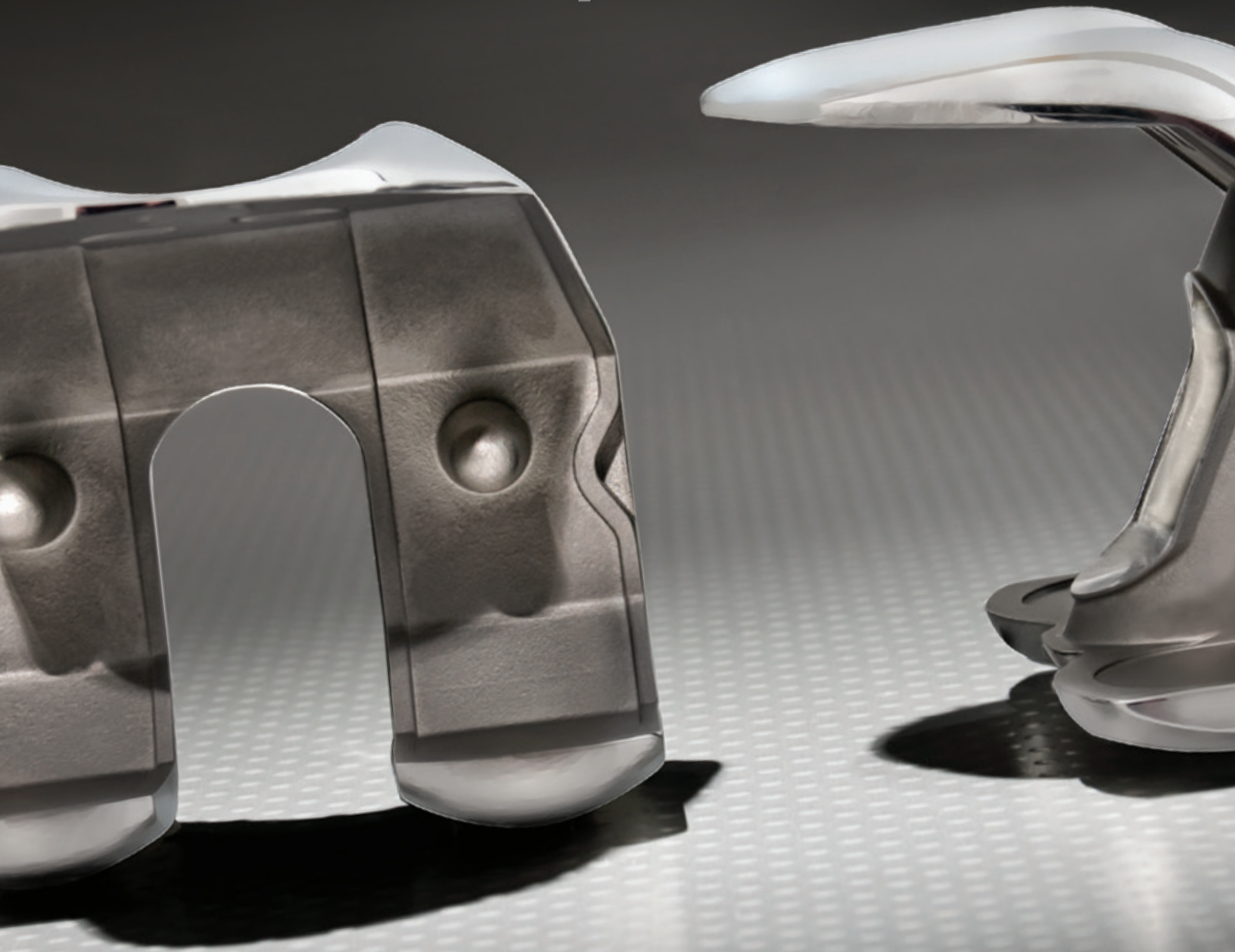
### **Tibial Up- and Down-Sizing**

The system's tibial up- and down-sizing helps maintain excellent congruency between the femoral component and polyethylene insert as a matched pair, with a same-size, up-size, and down-size tibial tray options.

Tibial up- and down-sizing maintains congruency throughout the sizes.



# Intra-operative Flexibility.





The Exactech Knee System provides intra-operative flexibility for simple conversion with a modern, easy-to-use system of implant options.

### Posterior Stabilized

The PS system removes 30 percent less bone than a traditional notch resection<sup>11</sup> and is designed to maximize stability and range of motion while providing surgeons an easier, faster and more consistent notch preparation.

### Cruciate Retaining

The CR system offers a unique surgical technique and implant system that maintains the anatomical integrity of the posterior cruciate ligament. A selection of tibial inserts with varying posterior tibial slopes allows surgeons to balance flexion-extension gaps independently without additional bone resections.

### Additional Constraint Options

Exactech's constrained inserts (PSC, CRC) allow surgeons to easily transition to increase constraint without additional bone preparation.

### Constrained Condylar

The Exactech revision system delivers a high-performance portfolio of implants and instruments for reproducible results in a streamlined revision procedure. The comprehensive system offers implant choices orthopaedic surgeons need to address the unique challenges in revision total knee arthroplasty.

Traditional Box Resection



Optetrak Logic's Notch Resection



Exactech's approach removes 30 percent less bone compared to traditional box resections.<sup>11</sup>



Optetrak Logic CR tibial inserts offer varying posterior slopes that help balance the gaps.



Optetrak Logic PS Constrained (PSC) tibial inserts are available when increased varus/valgus and rotational constraint is required from the implant.



Optetrak Logic CR Constrained (CRC) tibial inserts provide additional anterior/posterior constraint in the absence of a well functioning PCL.

# Reproducibility.



The Exactech Knee system offers personalized surgical workflows that allow for reproducibility and efficiency in your operating room.

### **Guided Personalized Surgery**

Customized for surgeon preferences, ExactechGPS® Guided Personalized Surgery uses surgeon- and engineer-driven principles to merge sophisticated technology with innovative instrumentation for a real-time patient-specific solution to achieve reproducible outcomes, cases after case.

### **Intuitive Instrumentation**

Exactech provides a comprehensive range of instrumentation options for patella, posterior referencing and ligament balancing. Exactech's Low Profile Instrumentation (LPI®) system of user-friendly instruments features an innovative layout that organizes the instruments with the surgeon's technique in mind and a modular case design that reduces the number of required instruments. Trials and other instruments are grouped by size in modular half trays, enabling instruments to be customized for a specific patient.



**Control your destination.**  
ExactechGPS – advanced surgical technology at your fingertips.



**Intuitive instrumentation provides modularity and supports a streamlined technique.**



**Logic LPI size-specific instrument trays.**



## References

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GLOBAL HEADQUARTERS  
2320 NW 66TH COURT  
GAINESVILLE, FL 32653 USA

+1 352.377.1140  
+1 800.EXACTECH  
+1 352.378.2617  
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