



Comprehensive Hip System





Science As Our Guide

The dream became a reality when Exactech launched its first product—a cemented hip stem. As the hip product line has grown and evolved it maintains one common goal: to provide a system of femoral stems, acetabular components and surgical instrumentation that would address a variety of situations encountered during primary and revision total hip arthroplasty.

We let science be our guide and conducted an extensive research review to identify the best of the best in design and materials. These proven features were blended with masterfully crafted innovations. Today Exactech Hip boasts a scope of products that spans the continuum of care, offering surgeons a variety of solutions to fit their patients' needs.



ALTEON[®]

The image displays two ALTEON Primary Femoral Stems. Each stem is made of polished metal and features a textured, porous coating on the proximal portion to facilitate bone ingrowth. The stems are shown from a perspective that highlights their curved, anatomical design. The background is a dark, reflective surface, and the stems are reflected below them. A blue gradient bar is positioned on the left side of the image, containing the text 'ALTEON' and 'Primary Femoral Stems'.

Primary
Femoral Stems

Alteon® Tapered Wedge Femoral Stem



The Alteon Tapered Wedge Femoral Stem incorporates specific design features to achieve immediate axial and rotational mechanical stability between the medial and lateral cortices of the femoral canal.

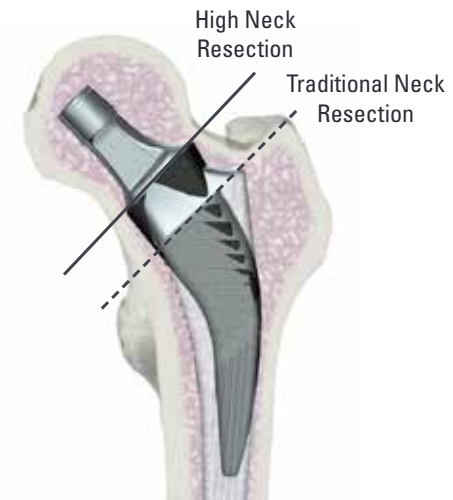
An optimized overall length and proximal/distal sizing to allow the stem to achieve fixation in all primary femur types (Dorr A, B, C) without compromising the implant features or surgical technique.¹



Alteon® Neck Preserving Femoral Stem

Developed for primary femoral solutions, the Alteon Neck Preserving Femoral Stem shares the proven features of conventional stems. Unlike traditional stems, the Neck Preserving Stem was designed to conserve more bone.

With a curved geometry and broach-only system, the implant is designed to preserve host bone and follow the native anatomy.



Neck Cut Comparison



ALTEON[®]

HA & HPS
Femoral Stems

Alteon® HA Femoral Stem

The design philosophy of the Alteon® HA Femoral Stem evolved from more than 25 years of clinical use. It is a fully hydroxyapatite-coated prosthesis which provides an excellent surface for bone ongrowth and biologic fixation.²⁻⁶

With incremental stem sizing, proportional neck geometry, and reduced stem lengths, the HA Stem adheres to the core design principles of the philosophy.



Alteon® Highly Polished Femoral Stem

The Alteon® Highly Polished Stem is a highly polished cemented stem which fits within the Alteon HA broach cavity. The highly polished surface of this stem is designed to reduce the amount of wear particles.^{7,8} This stem also features incremental stem sizing, proportional neck geometry, and uses all of the platform Alteon Instrumentation.



ALTEON[®]

Revision
Femoral Stem

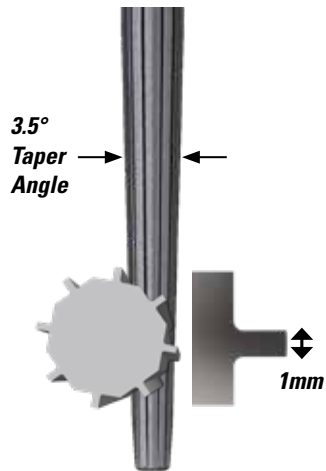
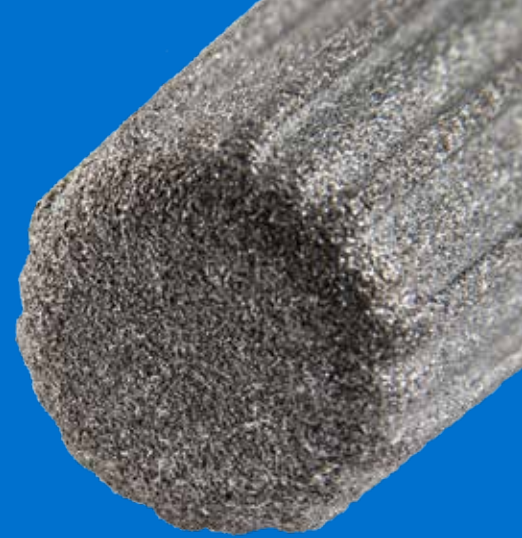




Achieves diaphysis fixation by bypassing damaged proximal bone.

Alteon® Monobloc Revision Stem

The Alteon Monobloc Revision Femoral Stem is a press-fit, distally fixed, one-piece tapered, splined titanium stem. The Monobloc Revision Stem intends to achieve axial and rotational mechanical stability and operative predictability through a carefully engineered combination of design features.



Taper Angle and Spline Design

The 3.5 degree taper angle and flat/broad spline geometry play an integral part in the mechanical stability that is designed to resist axial subsidence and rotation.⁹

Lengths

- 195mm
- 245mm
- 295mm

Note: The length is measured from the center of rotation to the distal tip of the stem



ALTEON[®]

Acetabular
Cup
and Liner





The Alteon Platform Acetabular system provides multiple cup implant configurations and bearing options which can be used for various surgical applications.

Asymmetric Porous Coating

The TAC™ porous technology strikes the optimal balance between material strength, pore size and porosity.

Optimized Head/Cup Aspect Ratio

This allows one to achieve the maximum head/cup combination while still maintaining polyethylene thickness.¹⁰

Three-part Locking Mechanism

The Alteon Cup features a three-part locking mechanism with more than 15 years of clinical use.¹¹ It consists of an apical tab intended to prevent liner translation and pullout, recessed scallops intended to provide rotational control, and a fully congruent liner/shell designed to virtually eliminate micromotion and minimize the potential for backside wear.^{12,13}

Vitamin E Enhanced Liners

Alteon® XLE® highly crosslinked vitamin E enhanced acetabular liners are designed to provide low wear while maintaining mechanical strength, reducing the free radicals, and oxidative degradation.^{14,15}

Liners are available in Neutral, Extended Coverage, +5 Lateralized, and Face Changing configurations.





NOVATION[®]

Primary
Femoral Stems

Novation® Tapered

The Novation® Comprehensive Hip System design provides a system of femoral stems and surgical instrumentation that addresses a variety of situations encountered during primary total hip replacement.

The dual-taper design, with a gradual taper in the M/L plane and a more rapid transition in the A/P plane is designed to accommodate the anterior bow of the femur while providing the wedge effect needed for stability.



Novation Splined

Novation Splined Stems rely on proximal fixation for initial stability and are enhanced by the distal splines for added rotational stability. In cases of proximal/distal mismatch, the Novation Splined Stem is also available in a Reduced Distal Diameter (RDD) option. A coronal slot reduces stiffness of the stem by up to 20 percent in the larger sizes.¹⁶

NOVATION[®]

Bipolar/Unipolar



Bipolar/Unipolar Heads

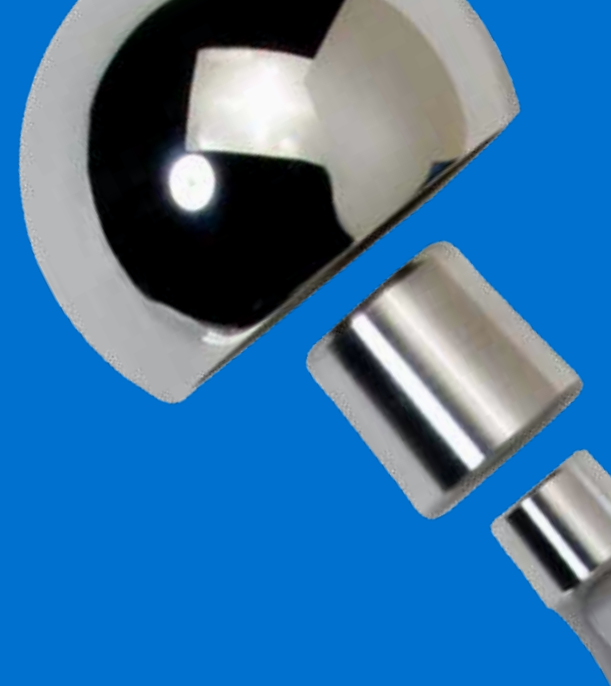
Compatible with all Exactech Femoral Stems, Bipolar/Unipolar Heads incorporate the following design advantages, as shown below.

Unipolar design advantages incorporate the following:

- a modular design,
- fully-machined, wrought cobalt chrome shell designed for accurate fit and minimized wear,
- and precision-machined tapers designed for optimum locking capabilities.

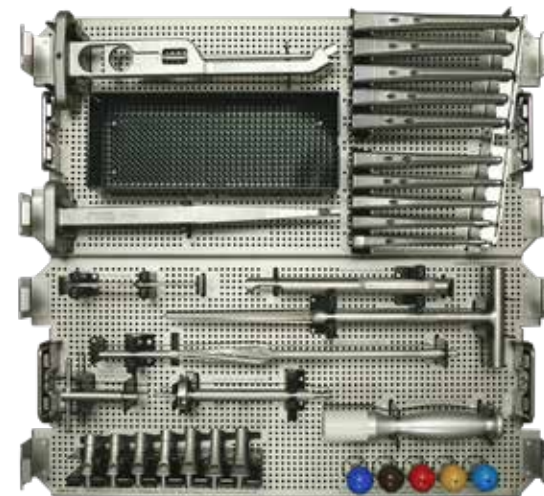
Bipolar design advantages incorporate the following:

- easy assembly with hand pressure,
- excellent locking integrity,
- a design to maximize polyethylene durability,
- and an optimal positive eccentricity throughout a range of sizes.



Novation CFS[®] Femoral Stems

The Novation CFS Femoral Stems are designed to provide surgeons with excellent initial fixation and long-term stability when paired with the core instruments that support Novation Tapered and Splined preparation. This allows for simple preparation and ease of intra-operative transition to a low-demand stem should the need arise.



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