The Evolution
The Klassic HD Hip System evolved from the optimal design features of the most successful implant constructs. Designed for optimum congruency, the Klassic HD Hip System addresses critical concerns about stability, wear, fixation, and range of motion and is designed to significantly reduce the amount of inventory needed to perform a total hip replacement. The result is a streamlined system that offers surgeons both ease and flexibility of use while reducing costs for hospitals.

Klassic HD® Femoral Stem
A tapered, double-wedge geometry offers initial fixation and rotational control, and proximally, the stem features Ti-Coat™, a rough titanium sintered porous coating for biological fixation. Mid-stem grit-blasting offers additional biological fixation, and distal polishing helps to prevent stress-shielding. Neck lengths are sized to permit retention of bony femoral neck, and are offered in both standard and offset configurations.

Klassic® Blade Femoral Stem
The Klassic Blade Femoral Stem features Ti-Coat for biological fixation, which offers a scratch fit consistent with the Klassic HD system. Stem placement is facilitated for any approach by a smooth medial radius transition from proximal stem to mid-body porous coating (patent pending) and a reduced distal tip. Offered in both standard and lateral offset necks, the stem is designed with flexibility and fit in mind.

Klassic HD® Femoral Heads
The Klassic HD Femoral Head is offered in both cobalt chrome and CeramTec BIOLOX®delta ceramic materials.

Klassic® BiPolar System
The Klassic BiPolar System offers an affordable fracture care solution for low demand patients without sacrificing quality. The Klassic BiPolar Head features a Cobalt Chrome (CoCr) outer diameter and an ultra high molecular weight polyethylene (UHMWPE) inner articulation surface that mates with a CoCr Klassic BiPolar Femoral Head. Coupled with standard and high offset femoral stem neck geometries, multiple options are available to fit most patient anatomy.
**Klassic HD® Acetabular Inserts**

Acetabular inserts, offered in two types of highly cross-linked ultra high molecular weight polyethylene, accommodate a 36mm head in sizes 52-64mm (a 32mm head is available for sizes 48mm and 50mm) to increase range of motion and decrease impingement. One insert for every cup establishes a minimum thickness (5mm), ensuring the center of rotation stays constant and retaining thin walls on every cup size.

**E-Link™ Vitamin E Stabilized Polyethylene**

E-Link Stabilized Polyethylene is a Vitamin E stabilized highly cross-linked ultra high molecular weight polyethylene. Vitamin E is blended into the UHMWPE in powder form, compression molded, and cross-linked by gamma radiation at 10 Mrads. E-Link utilizes Vitamin E to quench free radicals generated from the cross-linking process, yielding oxidative stability.¹

**ApeX-LNK™ Poly Highly Cross-linked Polyethylene**

ApeX-LNK Poly is a highly cross-linked ultra high molecular weight polyethylene. Radiated at 8 Mrads then stored, annealed and packaged in an oxygen-free N₂ environment provides wear reduction without jeopardizing strength compared to standard poly. Post-irradiation annealing eliminates residual stresses and maintains mechanical strength.² The patented* ApeX-LNK annealing and packaging system is specifically designed to prevent oxidation and maintain the material's tensile strength.

**Klassic HD® Acetabular Cup**

The Klassic HD acetabular cup is thin-walled (3.5mm) with 1.5mm of press-fit at the outer rim, and features high-porosity Ti-Coat for biological fixation. Three posteriorly positioned screw holes (two in sizes 48-52mm) offer flexibility in screw placement.

**Ti-Coat™ Porous Coating**

The Klassic HD Hip system offers Ti-Coat, a three-dimensional rough porous coating with a mean porosity of 61%. Ti-Coat is composed of commercially pure sintered asymmetrical grains that provide an initial scratch fit and biological fixation. Ti-Coat is provided throughout the Klassic HD Hip System for a consistent fixation strategy.

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*US Patent 7,803,310, AU Patent 2006229355, PCT Patent pending*