United Hip System
**Comprehensive Hip Replacement System**

The United Hip System offers surgeons the ability to meet various patient needs through a comprehensive portfolio of stem and cup products from bone stock preservation to complex revision arthroplasty.

Based on the anatomy, kinematics, biomechanics, engineering and material technologies, the United Hip System offers tapered stems, cylindrical stems and cemented stems, with different fixation concepts and acetabular cup systems to satisfy different patient needs.
Overview

Acetabular Component
- U-Motion II PLUS Cup
  - TPS PLUS
  - TPS PLUS
  - TPS with HA
  - Full XPE Cup
  - Bipolar II Cap

XPE Liner
- CoCr alloy Femoral Head
- BIOLOX® delta Femoral Head

Femoral Head
- CoCr alloy Femoral Head
- BIOLOX® delta Femoral Head

Femoral Stem
- UTS Stem
- UTF Reduced Stem
- Conformity Stem
- U2 Hip Stem
- U2 Revision Stem
- UCP Stem
- ReplCase Hip

Locking Cage
- Full XPE Cup

*BIOLOX® is a registered trademark of the CeramTec Group, Germany
U-Motion II PLUS™ Cup
Comprehensive cementless acetabular system

No-Hole and Cluster Hole Cup-
Titanium Plasma Spray PLUS (TPS PLUS) Coating
Multi-Hole Cup-
TPS with Hydroxyapatite (HA) Coating

- Designed to allow optimized screw angulation
- Designed to improve biological fixation
- Helps provide surgeons with an identifying marker for screw hole locations
- No-hole, cluster-hole and multi-hole cup configuration are available from 44 mm to 70 mm
- The inner locking ring on the acetabular cup provides the superior locking strength for polyethylene liner

Two Liner Material Options are Available
- E-XPE (Vitamin E Highly Crosslinked Polyethylene)
- XPE (Highly Crosslinked Polyethylene)

Standard and 20 ° lipped poly liners are available in XPE and E-XPE material.

Two Femoral Head Material Options are Available
- Cobalt Chrome (CoCr)
- BIOLOX® delta
Full XPE™ Cup
All poly cemented acetabular solution for hip arthroplasty

Designed for cemented fixation in primary or revision hip arthroplasty.

- Made from XPE material, the Full XPE cup is designed to provide optimal stability and improved longevity

Uniform 2.5 mm cement thickness designed to help even the load transfer to the cement and bone

Bipolar II™ Cap
Solution for hemi-arthroplasty

One-piece assembly with simple locking ring mechanism designed to allow surgical efficiency while maintaining strength.

- Designed to reduce the wear of the acetabulum

Highly Polished Surface
**UTS™ Stem**
Ideal for the MIS Approach

- **Tri-tapered Design**
  - Helps to ensure primary fixation while providing rotational stability

- **Shorter Stem Length**
  - Allows for the potential to preserve more host bone and improve implant fixation

- **TPS Coating**
  - Designed to improve biological fixation

- **Consistent Size Increment in UTS**
  - Consistent 1.5 mm increment in width enables surgeons to properly size the implant

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**UTF™ Reduced Stem**
Taper-fit Fixation

- **Dual Taper Design**
  - Intended to engage the cortex in the stem corners to provide excellent fixation
  - Provide superior axial and rotational stability

- **TPS Coating**
  - Designed to improve biological fixation

- **Refined Proximal Width in UTF**
  - 1.0 mm proximal width increments between commonly used sizes enables the surgeon to optimize between different metaphyseal widths
The Conformity Stem platform provides a comprehensive stem solution to hip arthroplasty surgery.

Following the classic concept of a fully-hydroxyapatite (HA) coating on the stem, multiple neck options, collared and collarless features, cementless and cemented options are available for surgeons to offer 77 various solutions for clinical situations, and to provide the implant that best meets the patient’s needs.

A hybrid compaction broaching technique is utilized to help provide initial stability and preserve bone stock and blood supply.

4 Options for Neck Restoration
- Standard
- High Offset
- Coxa Vara
- Short Neck

Microstructure of Hydroxyapatite Coating
- Adequate surficial microstructure helps to promote ideal osteoconduction after Conformity stem insertion.
**U2™ Hip Stem**
Novel matrix sizing enables optimal fit and fill

**Tri-wedge Design**
- Designed to help provide axial and rotational stability
- Intended to help achieve normal proximal load transfer and reduce the potential for stem subsidence

**Back Up Solution**
- U2 Cemented Stem shares the same instruments with U2 Matrix Stems and preserves the appropriate cement thickness around the stem to help ensure optimal canal fit

**Matrix Sizing**
- Addresses both proximal and distal canal “fit-and-fill” in order to achieve optimal load transfer and excellent initial stability in a variety of femoral canal shapes

- Proximal size 3 is available in 10, 11 and 12 mm distal diameter options
- 11 mm distal diameter is available in #2, #3 and #4 proximal size options

**Examples of Matrix Size Distribution**
U2™ Revision Stem
Monoblock fully coated cylindrical revision stem

Shorter Neck Offset
- The U2 Revision Stem is designed with a shorter neck offset compared to primary implant designs in order to facilitate joint reduction for patients with soft tissue scarring or contracture from previous surgeries.

U2 Revision Stem Offset Length
3–5 mm shorter than U2 hip stem

Fully Titanium-Plasma Spray Coating
- Designed to promote biological fixation

Straight 180 mm Length Stem
- Designed to enable diaphyseal fixation and avoid the risk of bone fracture, particularly for patients with a small femoral canal

Curved 230 mm Length Stem
- Designed to fit the anatomical shape of a femoral canal with increased bone deficiency and prevent potential cortical impingement and intraoperative shaft fracture

Anterior Bowing
UCP™ Stem
Cemented comprehensive femoral solution for hip arthroplasty

The polished surface is designed to allow minimal friction at the stem-cement interface and reduce the potential for cement failure.

Adjustment Markers
- Assist the surgeon in adjusting insertion depth of the stem to help achieve optimal leg length

Standard stem (125 mm) length for primary cases
Long stem options in 180 mm, 210 mm, and 230 mm lengths for revision cases.

RepliCase™ Hip
Acetabular and femoral stem molding system

The RepliCase Hip is used for molding a temporary total hip prosthesis during surgery, and is intended to allow surgeons to model a temporary hip prosthesis in a simpler way.

Made of Medical Grade Silicone
- Allows for repeated autoclave cycles

- 3 available sizes (S,M,L)
Locking Cage™
Acetabular reconstruction system

The Locking Cage acetabular revision system is designed to allow reconstruction of the acetabulum in patients with severe bone loss and pelvic discontinuity.

Locking Screw Design
The poly-axial bone screw is designed to provide flexibility selecting the optimal direction for screw insertion. In addition, the unique locking nut provides enhanced stability for the fixed structure by converting the compression screws into locking screws.

Modular Hook and Ischial Flange
- Designed to provide additional support and stability

Break the neck of Locking Nut, and leave the cap fully secured onto the Locking Cage
### Implant – Acetabular Component

#### U-Motion II PLUS Cup System

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Coating Surface</th>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Hole</td>
<td></td>
<td>TPS PLUS / TPS with HA</td>
<td>44 mm – 70 mm</td>
</tr>
<tr>
<td>Cluster-Hole</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-Hole</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Implant – Acetabular Component

#### Full XPE Cup

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CoCr</td>
<td></td>
<td>42 mm – 62 mm</td>
</tr>
</tbody>
</table>

### Liner

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Coating Surface</th>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td></td>
<td>TPS PLUS / TPS with HA</td>
<td>44 mm – 70 mm</td>
</tr>
<tr>
<td>20° Lipped</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Femoral Head

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Coating Surface</th>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CoCr</td>
<td></td>
<td>TPS PLUS / TPS with HA</td>
<td>44 mm – 70 mm</td>
</tr>
</tbody>
</table>

### Bipolar II Cap

<table>
<thead>
<tr>
<th>Type</th>
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<th>Coating Surface</th>
<th>Sizes</th>
</tr>
</thead>
</table>

### Femoral Head

<table>
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<tr>
<th>Type</th>
<th>Description</th>
<th>Coating Surface</th>
<th>Sizes</th>
</tr>
</thead>
</table>

### Accessories

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Coating Surface</th>
<th>Sizes</th>
</tr>
</thead>
</table>

* The actual spherical diameter of a 22 mm metal head is 22.2 mm
Implant – Acetabular Component

Locking Cage

<table>
<thead>
<tr>
<th>Cage</th>
<th>Hook</th>
<th>Ischial Flange</th>
<th>Screw</th>
<th>Locking Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>S / M / L</td>
<td>Single size</td>
<td>15 mm – 75 mm</td>
<td>Single size</td>
<td></td>
</tr>
</tbody>
</table>

RepliCase Hip

Cement Spacer Mold

Sizes : S / M / L

Implant – Femoral Stem

Conformity Stem

<table>
<thead>
<tr>
<th>Collarless</th>
<th>Collared</th>
<th>Coxa Vara</th>
<th>Short Neck</th>
<th>Cemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø12 – 22 mm</td>
<td>Ø12 – 22 mm</td>
<td>Ø12 – 22 mm</td>
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</tr>
</tbody>
</table>

Restrictor

Coating Surface :

Standard Offset : # 00 – # 14
High Offset : # 1 – # 14

UTS Stem

Coating Surface : TPS

Standard Offset : # 00 – # 14
High Offset : # 1 – # 14

UTF Reduced Stem

Standard Offset : # 00 – # 14
High Offset : # 0 – # 14
Implant – Femoral Stem

U2 Hip Stem

Matrix HA | Matrix Porous | Cemented
---|---|---
Proximal Size: | # 0 ~ # 7 | # 1 ~ # 7
Distal Diameter: | 8 ~ 15 mm | 9 ~ 15 mm

Centralizer | Restrictor
Ø10~14 mm | Ø13~22 mm | Ø12~22 mm

Proximal Size: | # 0 ~ # 6
Distal Diameter: | Ø10~14 mm | Ø12~22 mm

U2 Revision Stem

Straight : 180 mm / Ø11 – 18 mm
Curved : 230 mm / Ø11 – 18 mm (Left, Right)

UCP Stem

Centralizer | Restrictor
Ø8~18 mm | Ø12~22 mm

Stem Length : 125 mm
Long stem 180 mm : # 2 ~ # 3
Standard Offset : # 0 ~ # 5
Long stem 210 mm : # 3
High Offset : # 0 ~ # 5
Long stem 230 mm : # 3