Taperloc® Complete Hip System
Over 1 million times per year, Biomet helps one surgeon provide personalized care to one patient.

The science and art of medical care is to provide the right solution for each individual patient. This requires clinical mastery, a human connection between the surgeon and the patient, and the right tools for each situation.

At Biomet, we strive to view our work through the eyes of one surgeon and one patient. We treat every solution we provide as if it’s meant for a family member.

Our approach to innovation creates real solutions that assist each surgeon in the delivery of durable personalized care to each patient, whether that solution requires a minimally invasive surgical technique, advanced biomaterials or a patient-matched implant.

When one surgeon connects with one patient to provide personalized care, the promise of medicine is fulfilled.
Over the past 26 years, the Taperloc® Hip stem has become the industry standard in cementless hip arthroplasty.¹ Combining this unmatched clinical success with Biomet’s commitment to product innovation, the Taperloc® Complete Hip system has been introduced with design enhancements that restore leg length, stability, offset and ROM accurately and consistently.

Clinical Success of the Taperloc® Hip System

**100% Survivorship**
at a minimum 5 year follow-up in 49 rheumatoid patients²

**100% Survivorship**
at a 2–11 year follow-up in 114 patients 80 years old or older³

**99.6% Survivorship**
at a 12 year follow-up of 4,750 patients⁴

**99% Survivorship**
at a 22–26 year follow-up in 138 patients¹

**99% Survivorship**
at a 12 year follow-up in 115 patients⁵

**98% Survivorship**
at 8–13 year follow-up in 91 patients 50 years old or younger⁶

**95% Survivorship**
at a 10–18 year follow-up in 89 obese patients⁷

**94% Survivorship**
at a 10–18 year follow-up in 99 non-obese patients⁷
Taperloc® Complete Hip Stem

**Polished Anterior-Posterior Neck Flats**
Increase ROM by geometrically reducing the potential for impingement of the neck with the cup.

**Optimal Neck Angle**
133° neck angle increases ROM and improves stability through increased soft tissue tension.

**Rotational Stability Insertion Hole**
Provides rotational stability upon implantation.

**Offset Option**
Standard and high offset options reproduce various patient anatomies without lengthening the leg.

**Reduced Distal Transition**
Enhances implant fit in femoral canals with a proximal/distal mismatch.

**Clinically Proven PPS® Coating**
Allows for initial scratch-fit stability and bone fixation.

**Acetabular Options with E1® Antioxidant Technology**

**E1® Antioxidant Infused Liners with BIOLOX® delta Ceramic heads**
- Wear rates similar to MoM
- Oxidative stability
- High strength
- Large head options

**E1® Active Articulation**
- Large head for reduced risk of dislocation
- Large ROM – 163° with 60 mm E1® bearings
- Ultra-low wear – tested at suboptimal cup position (60° inclination)
- Clinically proven cup design and PPS® coating

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1. Optimal Neck Angle
2. Polished Anterior-Posterior Neck Flats
3. Rotational Stability Insertion Hole
4. Offset Option
5. Reduced Distal Transition
6. Clinically Proven PPS® Coating
7. Acetabular Options with E1® Antioxidant Technology
8. E1® Antioxidant Infused Liners with BIOLOX® delta Ceramic heads
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15. Large ROM – 163° with 60 mm E1® bearings
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17. Clinically proven cup design and PPS® coating
Titanium Alloy Ti-6AL-4V

Flexibility of titanium allows for stress transfer to preserve cortical density.

Flat Tapered Wedge Geometry

Enhances proximal offloading and bone preservation and provides for rotational stability.

Profile Options

Full length stem available in full profile and reduced distal options.

The Taperloc® Complete stem features a reduced distal geometry in which a gradual reduction of the stem substrate occurs distal to the porous coating level. The Taperloc® Complete stem’s reduced distal geometry enhances the proximal fill of the implant in the metaphysis. This particular design is the optimal choice to address a proximal/distal mismatch, which is common in a Dorr Type A femur, by properly accommodating the proximal metaphysis without the need to fit a narrow distal femoral geometry. This design enhancement is based on the traditional Taperloc® Reduced Distal stem which has been clinically successfully for over 16 years.5

The Taperloc® Complete stem design accurately addresses proximal/distal mismatch as seen in the x-ray above.
**Surgeon Education Opportunities**

The Anterior Supine Intramuscular (ASI) approach has shown many patient benefits\textsuperscript{19–21} whether utilizing a specialized fracture or standard operating table. Biomet offers a number of resources for surgeons to explore the ASI approach in the manner that best suits surgeon and hospital needs.
Taperloc® Complete Microplasty® Stem

The Taperloc® Complete Microplasty® stem is built upon the strong clinical heritage of the Taperloc® stem and incorporates the same design enhancements as the Taperloc® Complete full length stem. This stem option has been shortened 35 mm from the standard length stem to better address minimally invasive techniques, provide an alternative to femoral resurfacing and offer a unique solution in cases where a bone conserving prosthesis is desirable.

Titanium Alloy Ti-6AL-4V
Flexibility of titanium allows for stress transfer to preserve cortical density

Flat Tapered Wedge Geometry
Enhances proximal offloading and bone preservation and provides for rotational stability

Reduced Length
Stem length reduced 35 mm to preserve soft tissues and bony structures and better accommodate minimally invasive approaches

ASI Hip Instructional Courses
- One-day course with standard OR and ASI specific tables
- Led by experienced ASI faculty
- Didactic and hands-on cadaveric training

Surgeon Visitation Program
- One-on-one experience with ASI surgeon
- Observe live surgery
- Discuss implant design and rationale

For more information on these opportunities, please visit biometosa.com.
With the introduction of the Taperloc® Complete XR 123° stem option, the Taperloc® Complete system can accommodate a larger range of offsets to better restore patient biomechanics. The adjacent chart shows the additional offsets achieved with the Taperloc® Complete compared to a competitive system.

*Not for sale in Canada.*
Titanium Alloy Ti-6AL-4V
Flexibility of titanium allows for stress transfer to preserve cortical density

Flat Tapered Wedge Geometry
Enhances proximal offloading and bone preservation and provides for rotational stability

Profile Options
Available in Full Length Reduced Distal and Microplasty® stem options

Taperloc® Complete XR 123° Stem
The Taperloc® Complete XR 123° stem option has the same stem geometry as the Taperloc® Complete Full length and Microplasty® stems, but provides a 123° degree neck angle and a shortened neck length by 2 mm. These unique design features help to address femurs with a more varus neck by allowing for additional offset to properly restore hip biomechanics and soft tissue tensioning.
References


