

Cementless Tapered Femoral Stem



Responsible Innovation

Conformity | Stability | Versatility

TriFit

Conformity

Optimal geometry defined by global CT data¹ for a patient matched solution.

Stability

Optimised proximal-to-distal ratio and proximal flare designed for immediate and effective stability.

Versatility

Suitable for minimally invasive surgical approaches for anatomy preservation and compatible with Trinity[™] advanced bearing acetabular system.

Designed for patient fit



Conformity

Extensive global CT data was used in the development of TriFit TS[™] to define the geometry, including stem length, size range, offsets and optimal CCD angle – designed

Standard

to enhance patient fit. Restoration of the centre of rotation and biomechanics Lateralised of differing patient anatomies is facilitated via a comprehensive size range. Distally the stem is polished to help prevent osteointegration by transferring load proximally.

Small increments and two offset options (standard and lateralised) form a seamless range of sizes.



Competitor 'blade-type' stems ---

Stability

TriFit TS[™] is manufactured from forged titanium alloy for strength and biocompatibility. An optimised proximal-to-distal ratio and distal sweep is designed to promote proximal loading and prevent distal interference, which may reduce the risk of subsidence as seen with other stems of this philosophy³. Additionally the triple taper from anterior to posterior is designed to aid proximal loading and optimise stem stability.

Pure titanium is vacuum plasma sprayed over the proximal portion, which is then overlaid with 20 microns of Biomimetic Cementless

Technology coating. This calcium phosphate coating incorporates a microcrystalline structure which provides a large area for osteointegration^{4,5}, and has over 20 years of clinical history^{6,7,8}.





Versatility

Based on an optimised, clinically proven, bi-planar geometry^{9,10}, TriFit TS[™] is designed to be a bone conserving stem. The reduced lateral proximal shoulder



helps preserve as much of the greater trochanter as possible, whilst the distal portion similarly helps to minimise the amount of cancellous bone removed from the femur. A 50° neck cut preserves bone in the calcar region and increases proximal support for the implant medially. An optimised anterior-posterior width also helps minimise the amount of cancellous bone removed from the metaphysis.

Lightweight compact modular instrumentation offers the surgeon a range of approach-specific options for certain procedural steps.

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