

Excellently adapted: The TrabecuLink FlexiCones

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LINK's TrabecuLink Femoral and Tibial Cones provide solid anchorage in at least two of three zones.* They are used for reinforcement in cases of metaphyseal and diaphyseal bone defects or bone loss, and thus for stabilization in the distal femur and proximal tibia.

The latest generation of LINK Femoral and Tibial Cones also features a proven titanium alloy, ergonomic instruments and a simple surgical technique. Here is an overview.

The Femoral or Tibial Cone must reinforce the metaphyseal or diaphyseal medullary space of the distal femur or proximal tibia and adequately fill the bone cavity. In addition, the cones must ensure a secure fit in combination with the respective femoral or tibial prosthesis component. At the same time, osseointegration at the bone-implant interface should be promoted. The new TrabecuLink FlexiCones meet these important requirements due to their characteristic features: they are stable, elastic and variable. On request, they are also available as a patient-specific custom-made implant with the HX coating.



1 Stable fixation: TrabecuLink FlexiCones stabilize metaphyseal and diaphyseal bone defects

* R. Morgan-Jones, S. I. S. Oussedik, H. Graichen, F. S. Haddad: Zonal fixation in revision total knee arthroplasty, The Bone & Joint Journal, Vol. 97-B, No. 2, February 2015

Elasticity

Stable fixation through high primary stability and good fit.

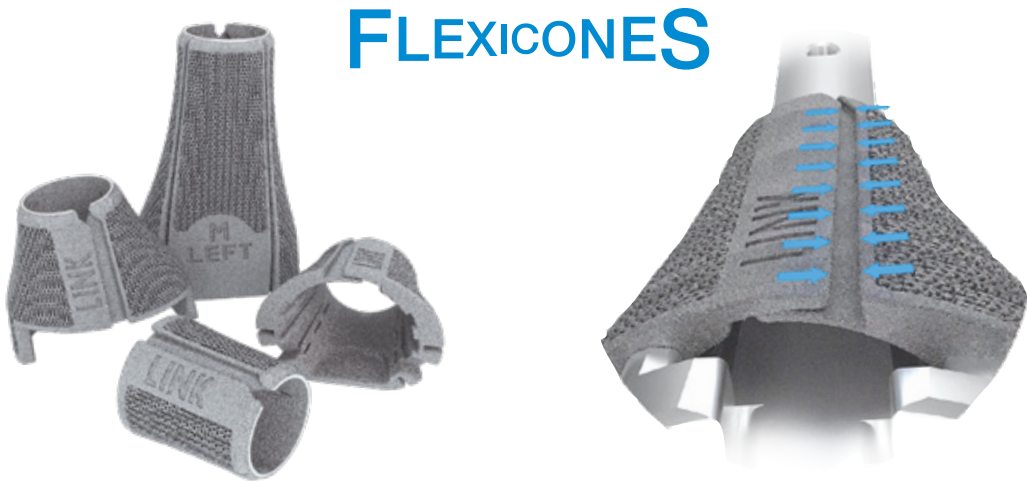
These features ensure that the cementless FlexiCones are particularly stable:

- High primary stability and good fit
- Cementless implantation on the bone side for bone regeneration
- Inner metal wall as protection against contact with bone cement
- Secure cement fixation of the knee prosthesis due to additional, revision-friendly notches

Elasticity through bending axes for individual adaptation.

The special elasticity of the FlexiCones results from the elastic design:

- Bending axes for individual adaptation
- Spring effect for easy surgical positioning and high primary stability
- Mechanical compression to promote bone regeneration



FLEXICONES

2 TrabecuLink Femoral Cones are available in sizes XS, S, M and L and in 3 zone (left and right), 2 zone (neutral) and proximal (neutral) versions.

3 Elastic design: TrabecuLink Femoral and Tibial Cones with spring effect for easy intraoperative positioning and high primary stability.



4 TrabecuLink Tibial Cones are available in four sizes (XS, S, M and L) and four variants (full, right half, left half and half).

High versatility due to possible applications with the entire LINK Endo-Model knee family.

TrabecuLink Femoral and Tibial Cones are highly versatile and can be used with the complete LINK Endo-Model knee family. The cones are available for all sizes of hinged knee prostheses.

The three-dimensional TrabecuLink structure promotes osseointegration and microvascularization and thus functional bone ingrowth.

The three-dimensional TrabecuLink structure with its pore size, porosity and structure depth provides a very good basis for promoting osseointegration and microvascularization. This is also the case when considering the protein layer that fills the structure of the bone precursor cells (fibronectin-vitronectin-fibrinogen).

The perfect tension at the compression point promotes osseointegration.

For example, the FlexiCones are inserted by press-fit and, due to their elasticity, they are compressed by the surgeon and pressed against the bone during insertion. This mechanism further promotes osseointegration.

FLEXICONES

Versatility

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Versatile combinations: TrabecuLink Femoral and Tibial Cones are compatible with the entire LINK Endo-Model knee family.

»We use the FlexiCones from LINK regularly«

Prof. Thorsten Gehrke, Helios ENDO-Klinik Hamburg, Germany

In revision surgery of knee prostheses, the surgeon is confronted with considerable bone loss and extensive osteolysis. To fill defects and stabilize the newly implanted revision knee prosthesis, the use of metallic bone replacement has become widely accepted. Here, the »wedges and cones« play by far the most important role. In the case of the cones, these are usually so-called trabecular metal variants with

a porous metal framework for optimized bone integration.

The Helios ENDO-Klinik uses rotating hinge knee prostheses in septic revision surgery on the knee joint. These often exhibit insufficient rotational stability with consecutive early loosening, especially in the metaphysis (AORI type II and III defects) (Hilgen et al., 2013). Since we began additionally using Femoral and Tibial Cones to

fill defects and achieve rotational stability, the situation has improved radically (Abdelaziz et al., 2019). Due to the flexibility and adaptability of these Femoral Cones to the individual medullary cavity geometry, sufficient stability and lasting fixation of the constrained revision prostheses can be achieved even in the case of large defects extending into the diaphysis (AORI type III, zone 2 to 3 acc. Morgan Jones) (Ohlmeier et al., 2020).

The Femoral Cones in particular have contributed to a significant improvement in the quality of care in cases of massive bone loss and osteolysis. Since their introduction at the beginning of the year, we use them in about 50 percent of our septic and aseptic knee prosthesis revisions. They allow optimal adaptation to the defect situation, so that the appropriate cone can be used depending on the size and location of a metaphyseal or diaphyseal defect. The cones can be inserted relatively deep into the femoral medullary canal. This results in a long-distance fixation with good bone-metal contact for extensive osseointegration. In addition, the stepped shape allows the intercondylar part of the prosthesis to be encircled and thus provides optimum rotation prevention. The instruments for preparing and insertion of the cones are reliable and easy to handle. They thus ensure a precise fitting and reproducible fixation in the bone.



Come into the **CONE ZONE**.
Get inspired.



TrabecuLink Femoral and Tibial Cones
Obtain solid fixation in at least two of three zones.*

* R. Morgan-Jones, S. I. S. Oussaidi, H. Graichen, F. S. Haddad: Zonal fixation in revision total knee arthroplasty. The Bone & Joint Journal, VOL. 97-B, No. 2, FEBRUARY 2015



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