



## Femoral and Tibial Cones

- Reinforcement of meta- and diaphyseal bone defects<sup>5</sup>
- Proven titanium alloy with antimicrobial effect<sup>3</sup>
- Ergonomic instruments and simple surgical technique

## References (general)

- 1 Cecile M. Bidan, Krishna P. Kommareddy, Monika Rimpler, Philip Kollmannsberger, Yves J.M. Brechet, Peter Fratzl, John W.C. Dunlop. et al.; How Linear Tension Converts to Curvature: Geometric Control of Bone Tissue Growth; PLoS ONE 7(5): e36336. <https://doi.org/10.1371/journal.pone.0036336> (2012)
- 2 Pascal Joly, Georg N. Duda, Martin Schöne, Petra B. Welzel, Uwe Freudenberg, Carsten Werner, Ansgar Petersen, et al.; Geometry-Driven Cell Organization Determines Tissue Growth in Scaffold Pores: Consequences for Fibronectin Organization; PLoS ONE 8(9): e73545. <https://doi.org/10.1371/journal.pone.0073545> (2013)
- 3 Biomaterialtest belegt stärkere antimikrobielle Wirksamkeit (gegen *Staphylococcus aureus*) der Titanlegierung gegenüber Reintantal: Eurofins BioPharma Product Testing Munich GmbH; Department of Microbiology, Behringstrasse 6/8, 82152 PlaneggMünchen, Germany; [www.eurofins.com/pharma-services](http://www.eurofins.com/pharma-services), Microbiology Munich@eurofins.com (internal data on file)
- 4 Steinemann SG; Compatibility of Titanium in Soft and Hard Tissue – The Ultimate is Osseointegration; Materials for Medical Engineering; WILEY-VCH, Volume 2, Page 199-203
- 5 P. K. Sculco, M. P. Abdel, A. D. Hanssen, D. G. Lewallen; The Management of Bone Loss in Revision Total Knee Arthroplasty, Bone Joint J 2016;98-B (1 Suppl A):120–4
- 6 Henricson A, Linder L, Nilsson KG.; A Trabecular Metal Tibial Component in Total Knee Replacement in Patients Younger than 60 Years: a Two-year Radiostereophotogrammetric Analysis; J Bone Joint Surg Br. 2008;90:1585–1593. doi: 10.1302/0301-620X.90B12.20797.
- 7 Gerald Küntscher; Praxis der Marknagelung; Friedrich-Karl Schattauer-Verlag (1962)
- 8 R. Texhammer, C. Colton et al; AO-Instrumente und Implantate (Technisches Handbuch); Springer Verlag, 2. Auflage, S.25 (2011)
- 9 Gabriele Panegrossi et al.; Bone Loss Management in Total Knee Revision Surgery; Int Orthop. 2014 Feb; 38(2): 419–427; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3923937/> (2014)
- 10 Ivan De Martino, Vincenzo De Santis, Peter K Sculco, Rocco D'Apolito, Joseph B Assini, Giorgio Gasparini; Tantalum Cones Provide Durable Mid-Term Fixation in Revision TKA, Clin Orthop Relat Res 473 (10), 3176-3182 (2015)



# TrabecuLink

Bone reaction-friendly

3-dimensional structure<sup>1,2</sup>

- Structure depth: 2 mm
- Pore size: 610-820  $\mu\text{m}$
- Porosity: 70%



Waldemar Link GmbH & Co. KG

Barkhausenweg 10 · 22339 Hamburg, Germany

Phone +49 (0)40 53995-0 · [info@linkhh.de](mailto:info@linkhh.de)

[www.linkorthopaedics.com](http://www.linkorthopaedics.com)



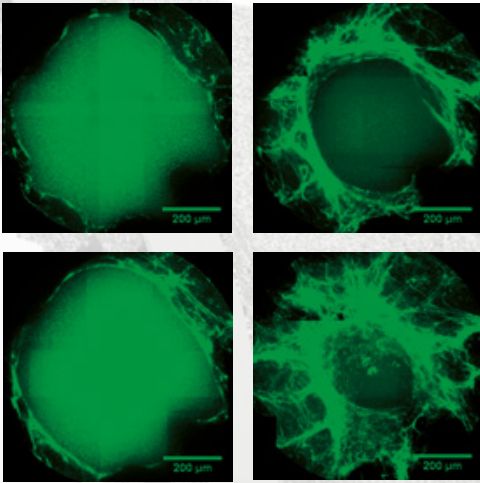
**LINK®** 



# FLEXICONES

Stable – Elastic – Versatile

[www.link-flexicones.com](http://www.link-flexicones.com)



The sequence of pictures shows the pore fill of the TrabecuLink structure under in vitro cell culture conditions.

Julius Wolff Institut, Charité - Universitätsmedizin Berlin, Germany

## TrabecuLink

- 3-dimensional structure for functional bone ingrowth<sup>1,2,4</sup>
- Pore geometry for effective cell ongrowth<sup>1,2,4</sup>
- Additive manufacturing process for latest generation of Femoral and Tibial Cones



## Femoral and Tibial Cones

- **Stable** – with cementless fixation (primary and secondary)<sup>6,10</sup>
- **Elastic** – due to integral bending axes
- **Versatile** – for a broad range of solutions<sup>9</sup>



# Stability

## Stable fixation

- High primary stability and good fit
- Cementless implantation for bone regeneration
- Inner metal wall protects against contact with bone cement
- Secure cement fixation ensured by additional “notches” (revision-friendly)



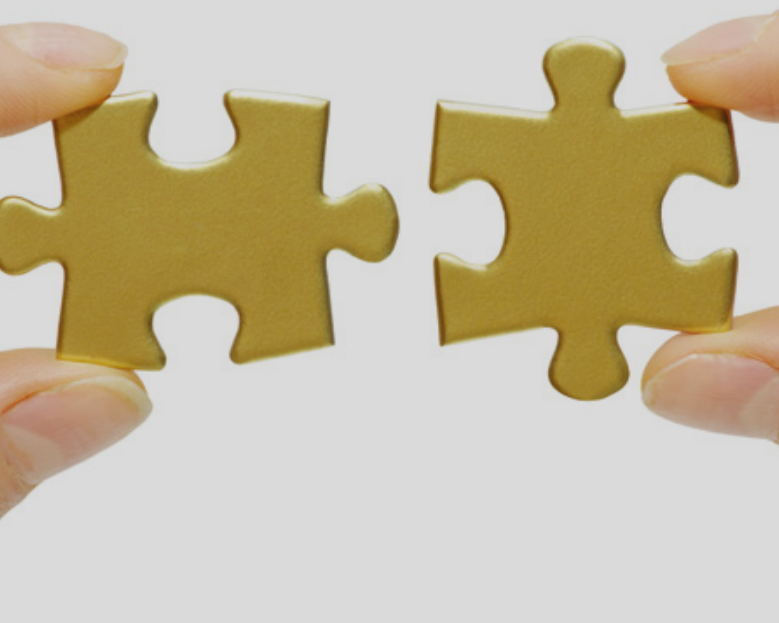


# Elasticity

## Elastic design

- **Bending axes** for adaptation to bone surfaces
- **Spring effect** for easy intraoperative positioning and high primary stability
- **Mechanical compression** promotes bone regeneration<sup>7,8</sup>





## Versatility

### Versatile combinations

- **Combinable** with the LINK Endo-Model knee family according to the surgical technique
- **Sizes** correspond to the sizes of the constrained knee prostheses

