



Endo-Model SL

Flexible – Anatomical – Expandable

The Endo-Model SL Rotational and Hinge Knee Prosthesis System was developed on the basis of decades-long experience with the Endo-Model Rotational and Hinge Knee System and the associated modular implant version Endo-Model–M.

This knee joint system is highly modular, and can therefore be employed in difficult primary and revision procedures. When it is used in combination with MEGASYSTEM-C implants, the range of indications is expanded to include treatment of revisions with large bone defects and also tumor arthroplasty.





The system incorporates biomechanical loading and anchoring principles. In combination with many years of experience gained from the use of proven implant components, this makes the system extremely reliable, thus optimizing the prospects for the surgical outcome.

For restoring the joint line in tumor and revision cases, special tibial washers and femoral segments are available.

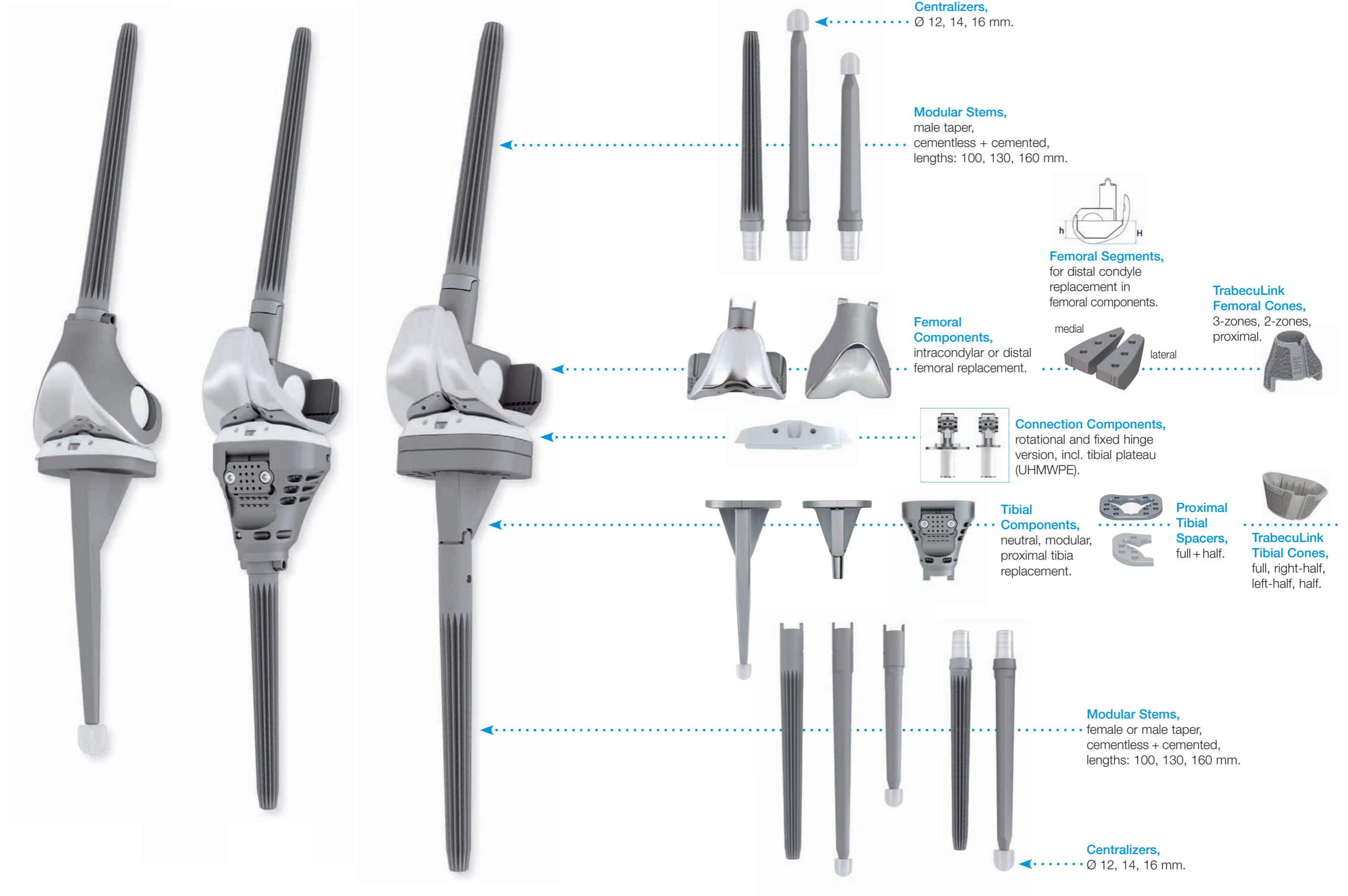
- Flexible – wide choice of implants and a high degree of modularity.
- Adaptable – intraoperative choice between rotational and fixed hinge versions (the joint components do not need to be substituted when the coupling mechanism is changed, in either primary or revision procedures).
- Integrated system – compatible interfaces between GEMINI SL and Endo-Model SL knee joint-femoral components.
- Optimized dimensions – to maximize bone conservation.
- Anatomical – valgusing alignment (6°) of the intramedullary box.
- Large “jump distance” – for more secure knee flexion. Use of the proven anti-luxation mechanism.
- Modular – optional use of cemented and cementless extension stems.
- Compatible – with MEGASYSTEM-C implants, and therefore suitable for treating serious bone defects.



CE 0482

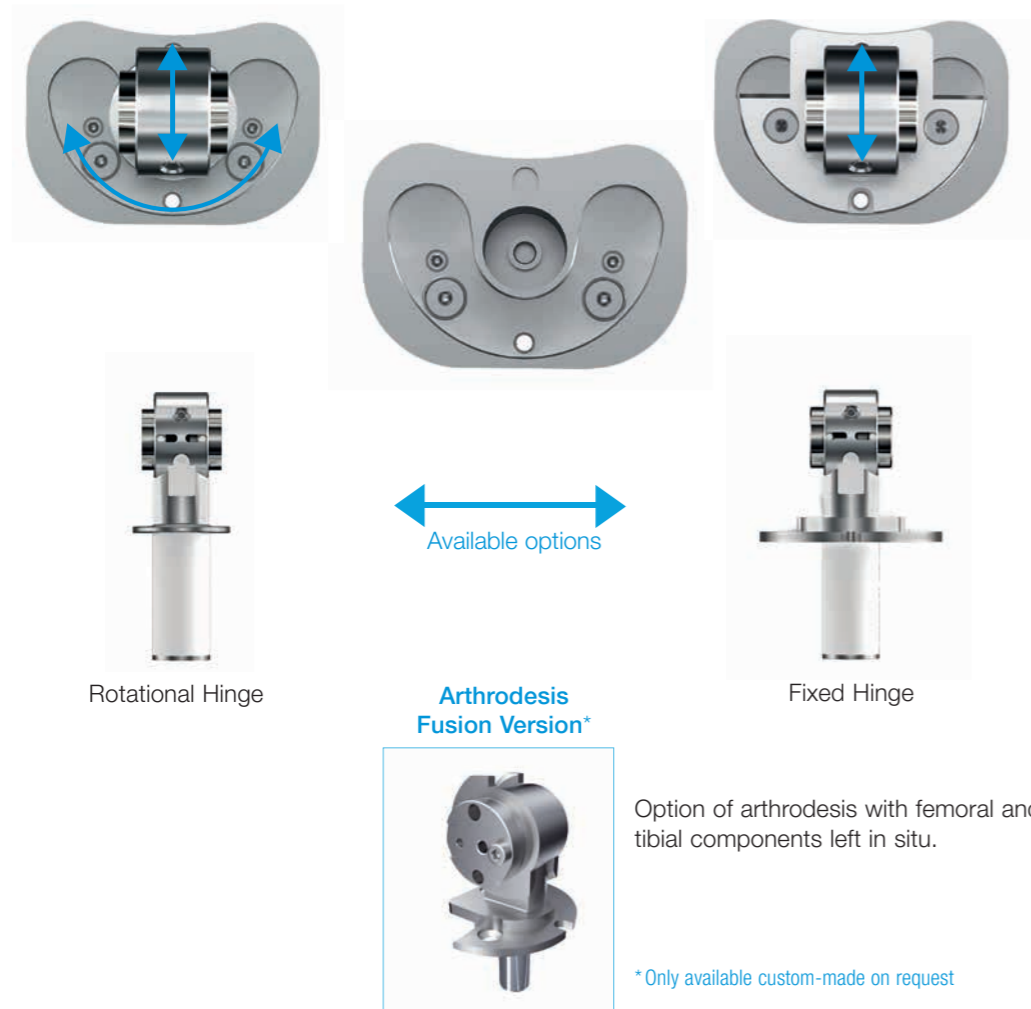
Explanation of Pictograms			
	Manufacturer		Article number
	Material (number)		Product meets the applicable requirements, which are regulated in the EU harmonization legislation for the affixing of the CE marking.





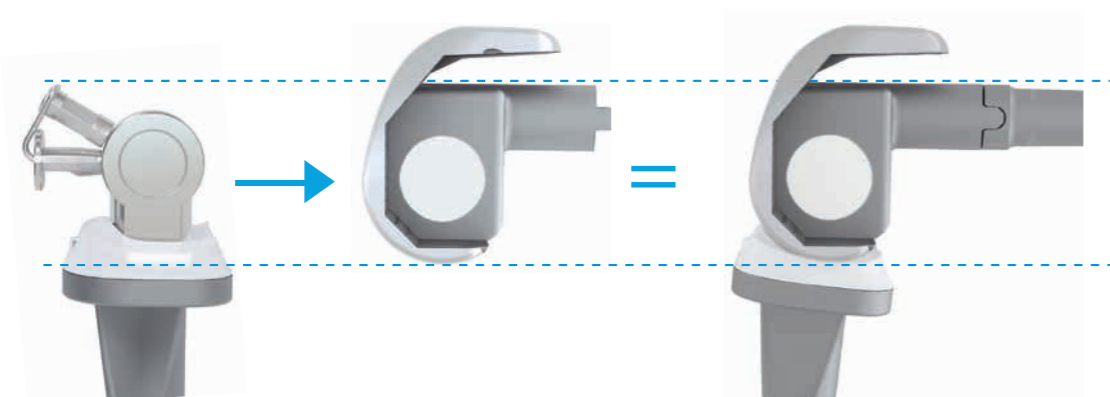
Flexible

- Intraoperative changeover from rotational to fixed hinge knee prosthesis with implant components in situ.
- Intraoperative flexibility because fully compatible with MEGASYSTEM-C Tumor and Revision System.



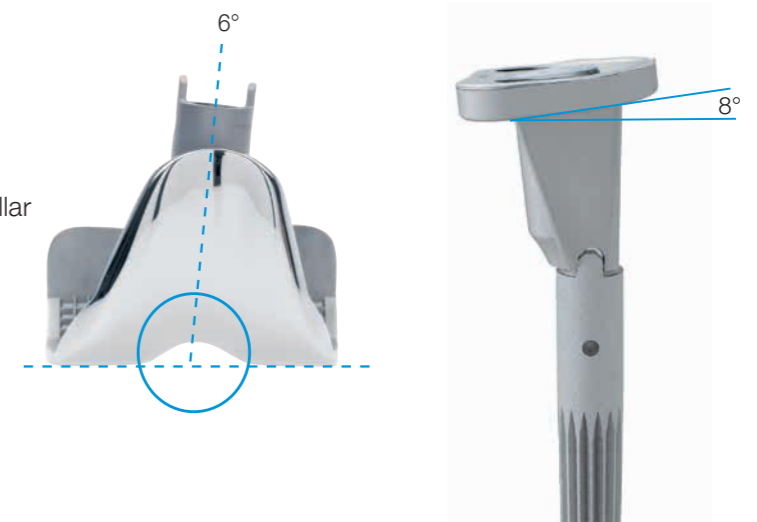
Coupling and Decoupling in the Joint Plane

- Minimal soft tissue distraction during reduction.



Anatomically Adapted

- 6° valgus from joint line.
- Tibial plateau with 8° slope to dorsal.
- Deep patellar articulating groove creates physiological patellar movement and patellar self-guidance.



Conserves Bone and Soft Tissue

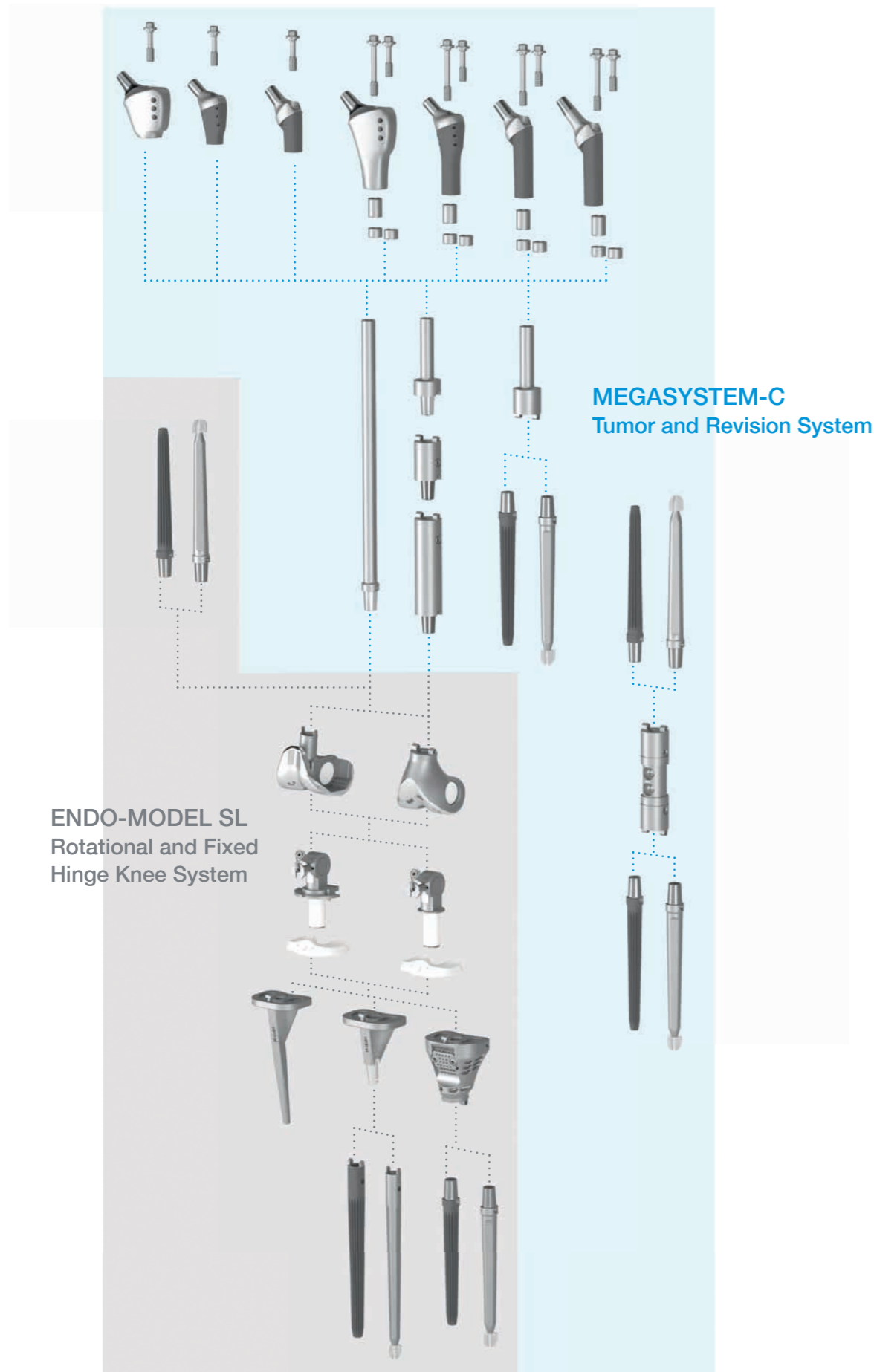
- Potential for bone and soft tissue conservation.
- Coupling with only minor distraction and minimal soft tissue release.
- Optimal box dimensions conserve bone substance.



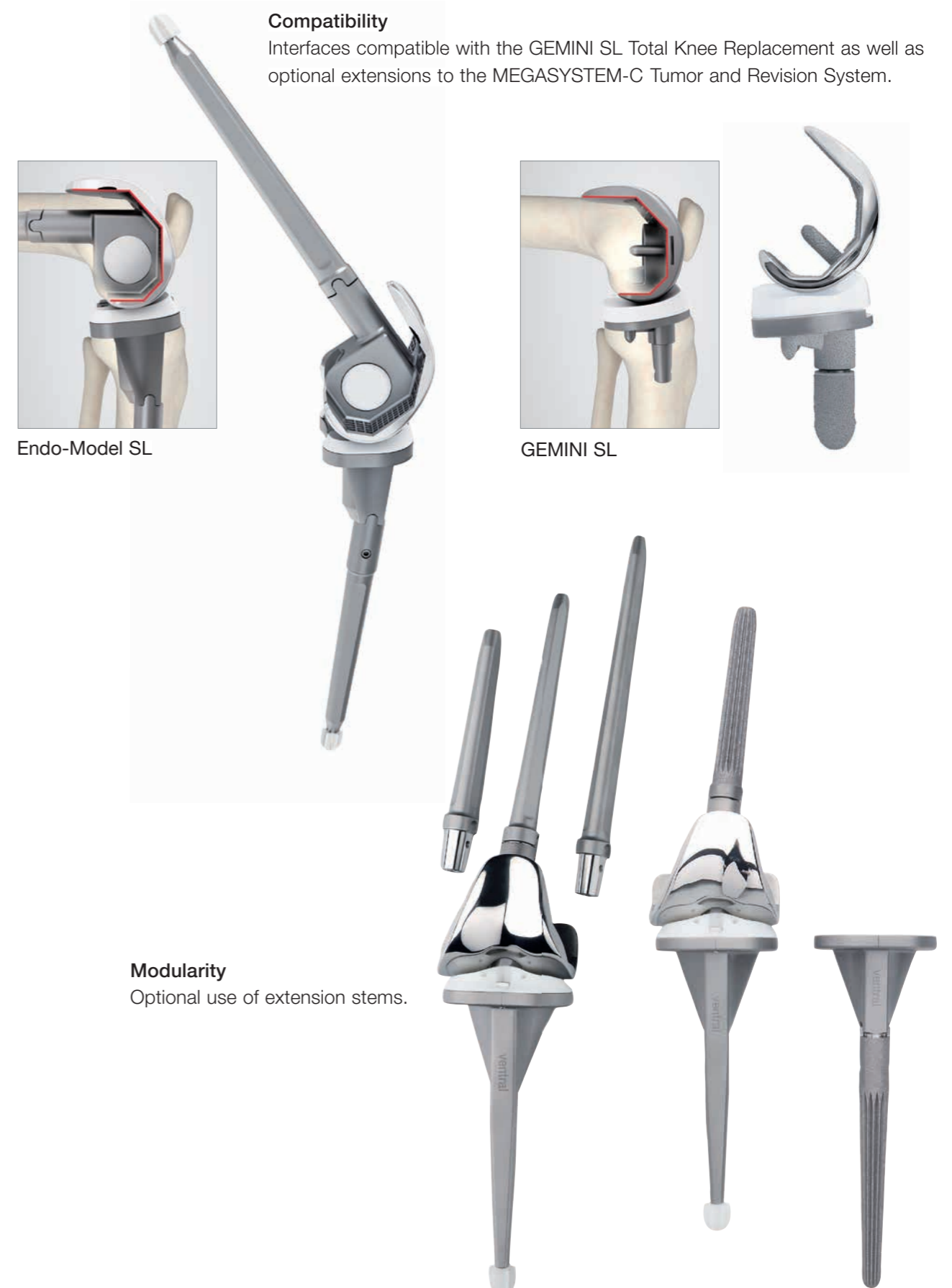
Wide Range of Stems

- Modular stems, cemented and cementless, for femur and tibia.
- In addition, cemented monoblock stem for tibia.
- Short stems for anticipated re-revisions.





Expandable



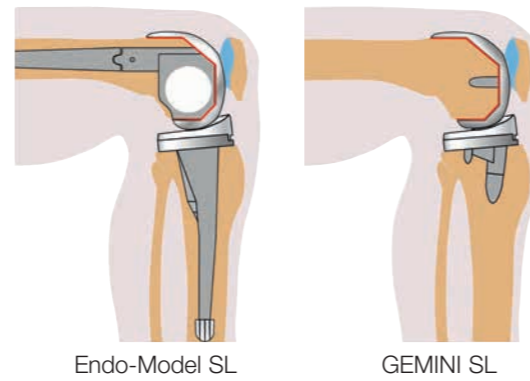
Designed for Reliability and Stability

- Based on the LINK Endo-Model Hinge Knee Prosthesis System.
- Large “jump distance” for more secure knee flexion.
- Choice of rotational or fixed hinge version.



Reproducible Surgical Technique

- Interfaces tailored to the LINK GEMINI SL Total Knee Replacement.
- Modern, modular instrument set.



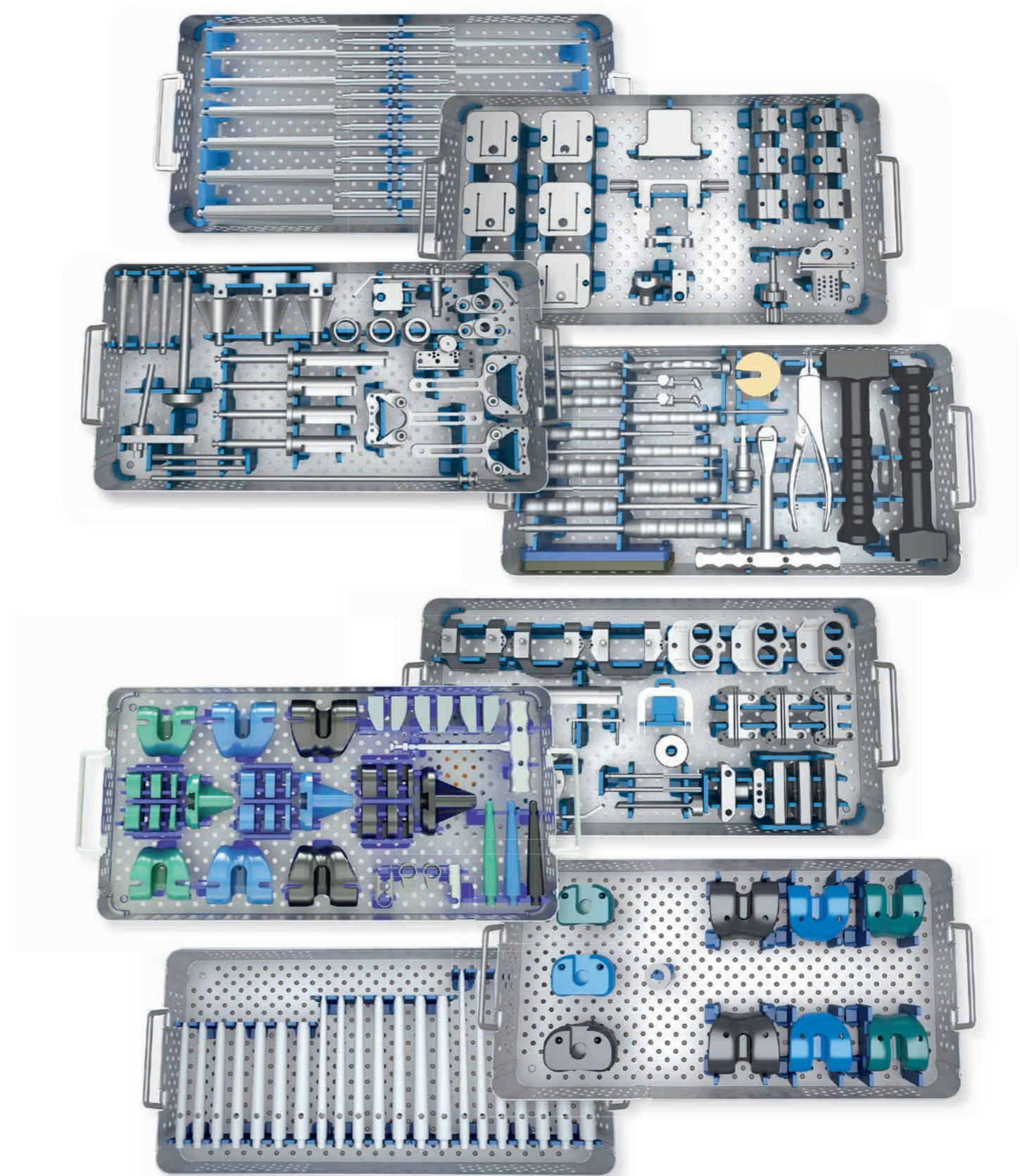
Rotational Stability in Extension

- Stability even if there is soft tissue damage.
- Developed so as to achieve a natural gait – combined with maximum reliability.



State-of-the-Art Instruments

The Endo-Model SL Knee Prosthesis System comes complete with a modern set of instruments. For femoral and tibial preparation, only four instrument sets are needed, plus the tapered reamers and sample components (intracondylar/partial replacement).



References (general)

Rodolfo Capanna MD, Guido Scoccianti MD, Filippo Frenos MD, Antonio Vilardi MD, Giovanni Beltrami MD, Domenico Andrea Campanacci MD;

What was the Survival on Megaprotheses in Lower Limb Reconstruction after Tumor Resection;

Clin. Orthop. Relat Res. (2015) 473: 820-830

H. Thabe;

Auswirkungen verschiedener konstruktiver Prothesenmerkmale auf Langzeitergebnisse;

Akt Rheumatol 2013; 38 (2013)

Entwicklung basiert auf dem erfolgreichen und langjährig bewährten Endo-Modell Rotations- und Scharnierversion.

E. Engelbrecht, A. Siegel, J. Röttger, and Prof. H. W. Buchholz*;

Statistics of Total Knee Replacement: Partial and Total Knee Replacement, Design St. Georg;

Journal of Clinical Orthopaedics, 1976, No. 120, pp 54-64 (K3)

E. Engelbrecht, E. Nieder, E. Strickle, A. Keller;

Intrakondyläre Kniegelenkendoprothese mit Rotationsmöglichkeit – ENDO-MODELL®;

CHIRURG 52: 368-375 (1981) (K1)

R. Dederich und L. Wolf;

Kniegelenkprothesen-Nachuntersuchungsergebnisse;

Unfallheilkunde (1982) 85:359-368 (K2)

J. Röttger, K. Heinert;

Die Knieendoprothesensysteme (Schlitten- und Scharnierprinzip). Beobachtungen und Ergebnisse nach 10 Jahren

Erfahrung mit über 3.700 Operationen.

Nayana Joshi, Antonio Navarro-Quilis;

Is There a Place for Rotating-Hinge Arthroplasty in Knee Revision Surgery for Aseptic Loosening?

The Journal of Arthroplasty 2008; 23(8):1204-1210 (K94)

M. Napp, M. Frank, M. Witt;

Pathologische Fraktur des distalen Femurs bei Knie-TEP; Der Orthopäde,

Band 38, Heft 10, Oktober 2009 (K96)

Dae Kyung Bae, Sang Jun Song, Kyoung Ho Yoon, Jung Ho Noh;

Long-Term Outcome of Total Knee Arthroplasty in Charcot Joint: A 10- to 22- Year Follow-Up;

The Journal of Arthroplasty 2009; 24(8):1152-1156 (K98)

Please note the following regarding the use of our implants:

1. Choosing the right implant is very important.

The size and shape of the human bone determines the size and shape of the implant and also limits the load capacity. Implants are not designed to withstand unlimited physical stress. Demands should not exceed normal functional loads.

2. Correct handling of the implant is very important.

Under no circumstances should the shape of a finished implant be altered, as this shortens its life span. Our implants must not be combined with implants from other manufacturers. The instruments indicated in the Surgical Technique must be used to ensure safe implantation of the components.

3. Implants must not be reused.

Implants are supplied sterile and are intended for single use only. Used implants must not be used again.

4. After-treatment is also very important.

The patient must be informed of the limitations of the implant. The load capacity of an implant cannot compare with that of healthy bone!

5. Unless otherwise indicated, implants are supplied in sterile packaging.

Note the following conditions for storage of packaged implants:

- Avoid extreme or sudden changes in temperature.
- Sterile implants in their original, intact protective packaging may be stored in permanent buildings up until the "Use by" date indicated on the packaging.
- They must not be exposed to frost, dampness or direct sunlight, or mechanical damage.
- Implants may be stored in their original packaging for up to 5 years after the date of manufacture. The "Use by" date is indicated on the product label.
- Do not use an implant if the packaging is damaged.

6. Traceability is important.

Please use the documentation stickers provided to ensure traceability.

7. Further information on the material composition is available on request from the manufacturer.

Follow the instructions for use!

Waldemar Link GmbH & Co. KG, Hamburg

All content in this catalog, including text, pictures and data, is protected by law. Every instance of use, whether in part or in whole and which is not permitted by law, is subject to our prior consent. In particular, this applies to the reproduction, editing, translation, publishing, saving, processing, or passing on of content stored in databases or other electronic media and systems, in any manner or form. The information in the catalogs is solely intended to describe the products and does not constitute a guarantee.

The Surgical Technique described has been written to the best of our knowledge and belief, but it does not relieve the surgeon of his/her responsibility to duly consider the particularities of each individual case.

Products shown in this document may not be available in your country. The product availability is subject to the approval and/or registration regulations of the respective country. Please contact Waldemar Link GmbH & Co. KG if you have questions about the availability of LINK products in your country.

Waldemar Link GmbH & Co. KG and/or other corporate affiliated entities own, use or have applied for the following trademarks in many jurisdictions: LINK, BiMobile, SP II, Modell Lubinus, E-Dur, EndoDur, T.O.P. II, BetaCup, CombiCup PF, CombiCup SC, CombiCup R, MobileLink, C.F.P., LCU, SP-CL, LCP, MIT-H, Endo-Model, Endo-Model SL, MP, MEGASYSTEM-C, GEMINI SL, SPAR-K, LCK, Link OptiStem, HX, TiCaP, X-LINKed, PorAg, LINK PorEx, BiPorEx, PorEx-Z, TrabecuLink, Tilastan, customLINK, RescueSleeve, Stactip, VACUCAST.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and/or names or their products and are the property of their respective owners.



Waldemar Link GmbH & Co. KG

Barkhausenweg 10 · 22339 Hamburg · Germany

Phone +49 40 53995-0 · info@linkhh.de

www.linkorthopaedics.com

LINK[®]

