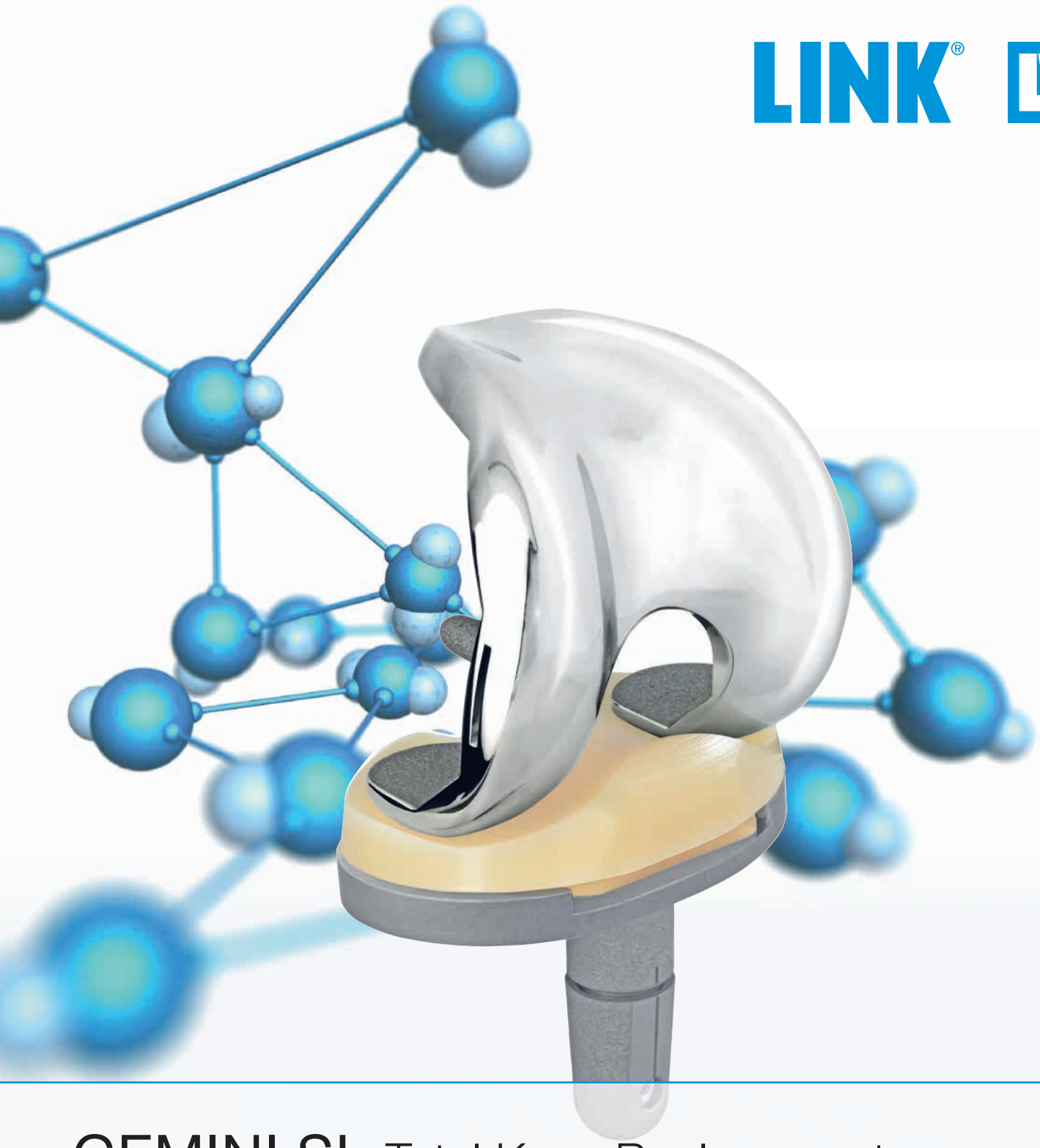
LINK®



GEMINI SL Total Knee Replacement

E-dur Vit-E-Plateau

Implants

Description

As far back as the 1960s, studies confirmed that UHMWPE is an outstanding material for tribological bearing in joint replacements [1,2,3].

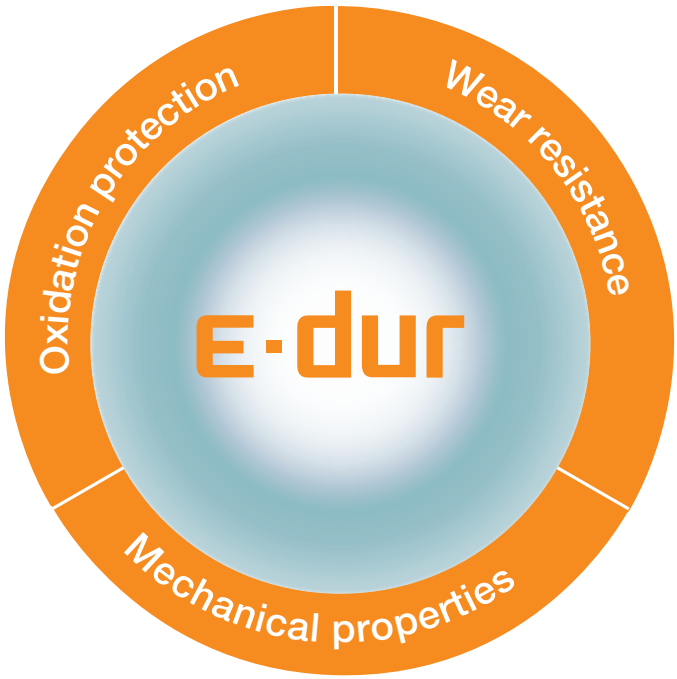
The key properties of UHMWPE are:

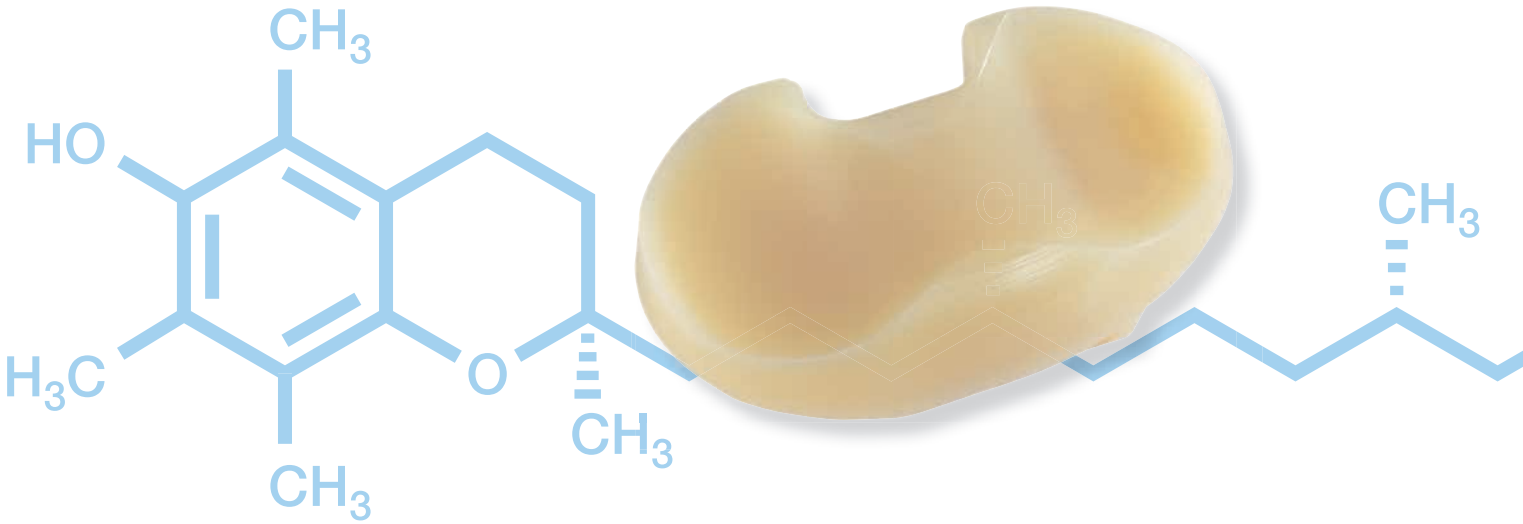
- Biocompatibility
- High abrasion resistance [3,4]
- Impact resistance
- Fatigue strength and crack resistance

It therefore conforms to national and international standards for implant materials [2,4].

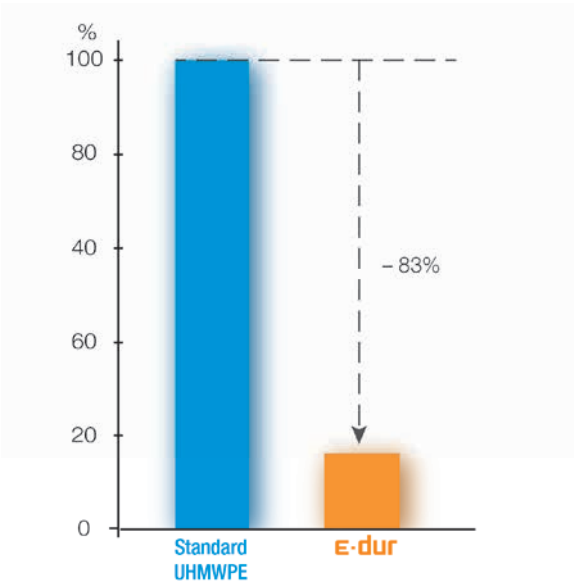
Consequently, UHMWPE became the "**gold standard**" for tibial articular surfaces in knee joint reconstructions [2,5]. This status is confirmed by outstanding long-term results of published studies and registry data [6,7,8]. Now this "**gold standard**" for orthopedic implants has been improved by further increasing its mechanical properties and durability [18]. Highly crosslinking produced a marked improvement in abrasion resistance [9,10,11,12,13,14]. In addition, effective oxidation protection is achieved by enriching the material with vitamin E [9,10].

In the production of e-dur **Vit-E plateaus,** vitamin E is used as an antioxidant in order to protect the material by neutralizing the free radicals created by highly crosslinking. The product's mechanical properties and biocompatibility are preserved [4,9,15,16,17].





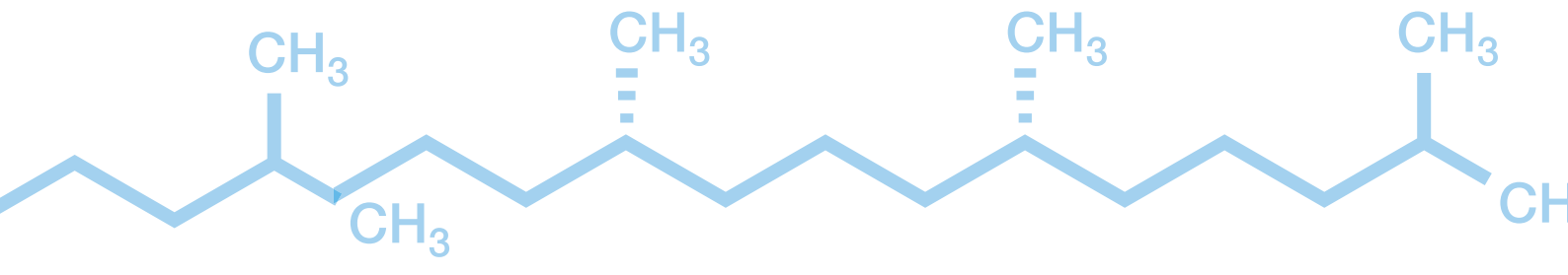
Properties



Abrasion

Wear resistance

The process of highly crosslinking produces an improvement in the abrasion resistance of UHMWPE, while enrichment with vitamin E counteracts the aging process [18].



GEMINI SL Total Knee Replacement

Natural joint reconstruction with physiological range of motion and functionality: [19,20]

- Raised femur shield
- Deep patellar articulating groove
- Physiological patella movement
- Anatomic tibia

High congruent articulation ensures uniform load transmission and high stability over the entire movement cycle. [21,22]

Excellent treatment options for a wide range of indications plus greater intraoperative flexibility:

- Modular, anatomically designed prosthesis components.
- Wide choice of sizes for every stature, irrespective of gender or ethnicity.
- Precise instrument set permits accurate axial alignment and soft tissue adjustment with optional extramedullary femoral referencing.

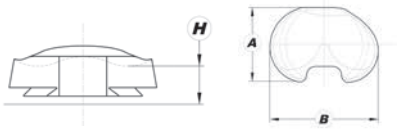
Mobile Bearing
with concave tibial plateau surface

- Congruence of the articular surfaces in extension.
- Articulating femoral condyle as flexion increases, giving greater freedom of flexion and relieving strain on the patella.
- High congruence stabilizes the joint, also in the absence of the posterior cruciate ligament.

Implants

GEMINI SL e·dur Plateaus – Mobile Bearing

MAT X-LINKed Vit-E UHMWPE



REF	Size	Side	H mm	A mm	B mm	Identification
318-801/12	x-small	right	12	42	62	R1
318-808/12	x-small plus	right	12	46	69	R1B
318-802/12	small	right	12	46	69	R2
318-807/12	medium small/medium small plus	right	12	47	74	R2A/R2B
318-803/12	medium	right	12	47	74	R3
318-804/12	large	right	12	53	78	R4
318-805/12	x-large	right	12	56	85	R5
318-811/12	x-small	left	12	42	62	L1
318-818/12	x-small plus	left	12	46	69	L1B
318-812/12	small	left	12	46	69	L2
318-817/12	medium small/medium small plus	left	12	47	74	L2A/L2B
318-813/12	medium	left	12	47	74	L3
318-814/12	large	left	12	53	78	L4
318-815/12	x-large	left	12	56	85	L5
318-801/14	x-small	right	14	42	62	R1
318-808/14	x-small plus	right	14	46	69	R1B
318-802/14	small	right	14	46	69	R2
318-807/14	medium small/medium small plus	right	14	47	74	R2A/R2B
318-803/14	medium	right	14	47	74	R3
318-804/14	large	right	14	53	78	R4
318-805/14	x-large	right	14	56	85	R5
318-811/14	x-small	left	14	42	62	L1
318-818/14	x-small plus	left	14	46	69	L1B
318-812/14	small	left	14	46	69	L2
318-817/14	medium small/medium small plus	left	14	47	74	L2A/L2B
318-813/14	medium	left	14	47	74	L3
318-814/14	large	left	14	53	78	L4
318-815/14	x-large	left	14	56	85	L5
318-801/16*	x-small	right	16	42	62	R1
318-808/16*	x-small plus	right	16	46	69	R1B
318-802/16*	small	right	16	46	69	R2
318-807/16*	medium small/medium small plus	right	16	47	74	R2A/R2B
318-803/16*	medium	right	16	47	74	R3
318-804/16*	large	right	16	53	78	R4
318-805/16*	x-large	right	16	56	85	R5
318-811/16*	x-small	left	16	42	62	L1
318-818/16*	x-small plus	left	16	46	69	L1B
318-812/16*	small	left	16	46	69	L2
318-817/16*	medium small/medium small plus	left	16	47	74	L2A/L2B
318-813/16*	medium	left	16	47	74	L3
318-814/16*	large	left	16	53	78	L4
318-815/16*	x-large	left	16	56	85	L5
318-801/18*	x-small	right	18	42	62	R1
318-808/18*	x-small plus	right	18	46	69	R1B
318-802/18*	small	right	18	46	69	R2
318-807/18*	medium small/medium small plus	right	18	47	74	R2A/R2B
318-803/18*	medium	right	18	47	74	R3
318-804/18*	large	right	18	53	78	R4
318-805/18*	x-large	right	18	56	85	R5
318-811/18*	x-small	left	18	42	62	L1
318-818/18*	x-small plus	left	18	46	69	L1B
318-812/18*	small	left	18	46	69	L2
318-817/18*	medium small/medium small plus	left	18	47	74	L2A/L2B
318-813/18*	medium	left	18	47	74	L3
318-814/18*	large	left	18	53	78	L4
318-815/18*	x-large	left	18	56	85	L5

* The grey marked items are only available on request.

Literature, Further Information

GEMINI SL Total Knee Replacement
Surgical Technique

For more information please register for our LINK Media Library (linkorthopaedics.com)

Literaturquellen:

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21 Interne Daten - A.S. Greenwald Orthopaedic Research Laboratories Report „Classification of Mobile Bearing Knee Design: Mobility and Constraint“, 2001/2002
22 J. Insall, „Historical Development, Classification, and Characteristics of Knee Prostheses“, in Surgery of the Knee 2nd Edition, John N., Insall Ed.; Chrurchill Livingstone, 1993

CE 0482

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

Important Information

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!

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