







Patella Components

for Endo-Model Knee Systems

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.

Patella Components

for Endo-Model Knee Systems

02 **System Description**

Implants

- 03 Patella Components Endo-Modell Standard – M/–W, 1-peg
- 03 Patella Components Endo-Modell Standard – M/–W, 3-pegs

Instruments

- 04 Instrument Set for Patella Components, 1-peg
for LINK Endo-Model Standard – M/–W Knee Prostheses
- 05 Instrument Set for Patella Components, 3-pegs
for LINK Endo-Model Standard – M/–W Knee Prostheses
- 06 Accessories: Adapter, Sawblades

07 **Indications/Contraindications**

Surgical Technique

- 08 Sizing
- 09 Preparation and Reaming
- 11 Sawblade Resection Option
- 12 Fixation Hole Drilling
- 13 Implantation
- 14 Further Literature

Important Information

Patella Components for Endo-Model Knee Systems



Anatomically-designed prosthetic components that offer long-term anchoring and a reproducible implantation technique are essential for good results in knee arthroplasty. Patella Components are part of the LINK Endo-Model Knee Systems. The components geometry is carefully adapted to ensure a high level of congruency with the patellofemoral joint.

The two versions of Patella Components (1-peg and 3-pegs) are offered exclusively for cemented fixation and are usable with the following LINK products:

Applications of the 1-peg version:

- Endo-Model Standard – M / – W Knee Prostheses (**REF** 15-2521/30 to /40)

Applications of the 3-pegs version:

- Endo-Model Standard – M / – W Knee Prostheses (**REF** 15-2522/30 to /40)

The 1- and 3-pegs Patella Components are available in three sizes for Endo-Model Standard – M / – W.

Instrument Set

Instruments designed to fit the implants are available, allowing the surgeon to work easily and reliably.

The patella component can be prepared by resection using an oscillating saw or by reaming with a patella reamer. In either case the tool is guided with precision, ensuring an exact fit of the implant.

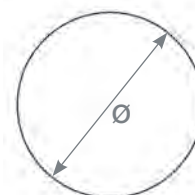
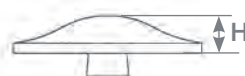
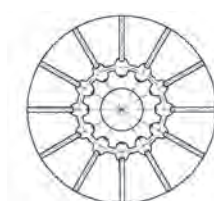
The design and simple function enable safe cleaning and maintenance.



Patella Components, 1-peg,

MAT UHMWPE

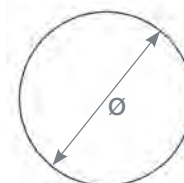
REF	Size	Outer-Ø mm	Height mm
15-2521/30	small (1)	30	8
15-2521/35	medium (2)	35	8
15-2521/40	large (3)	40	8

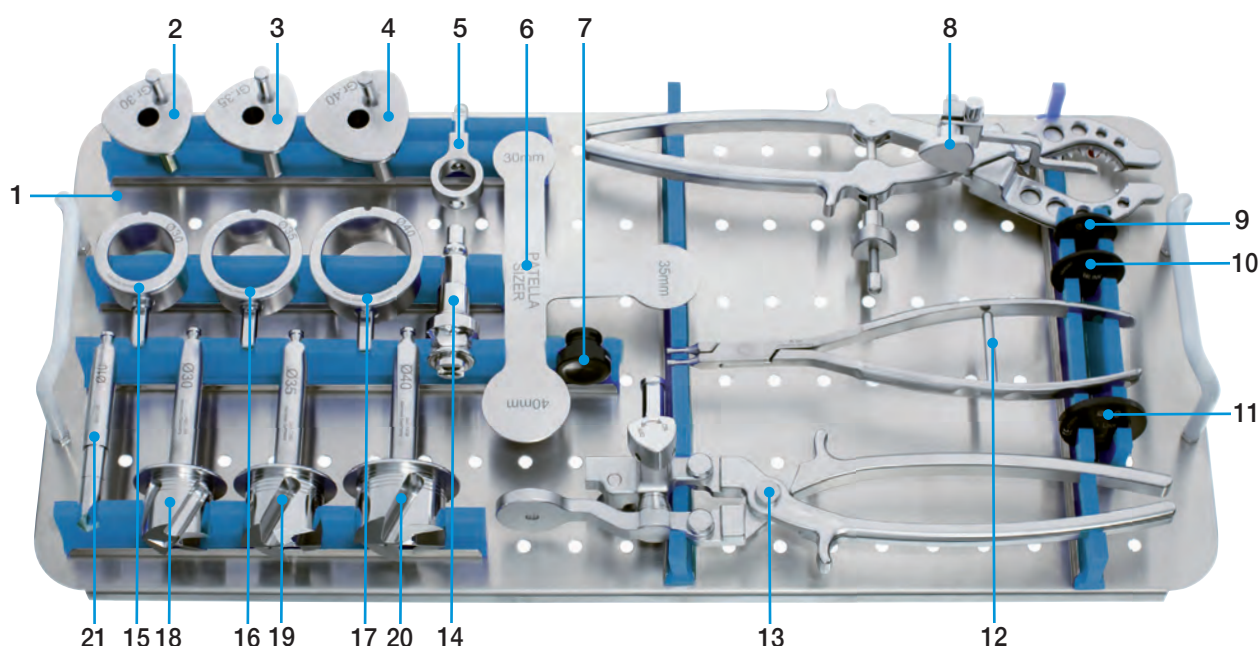


Patella Components, 3-pegs,

MAT UHMWPE

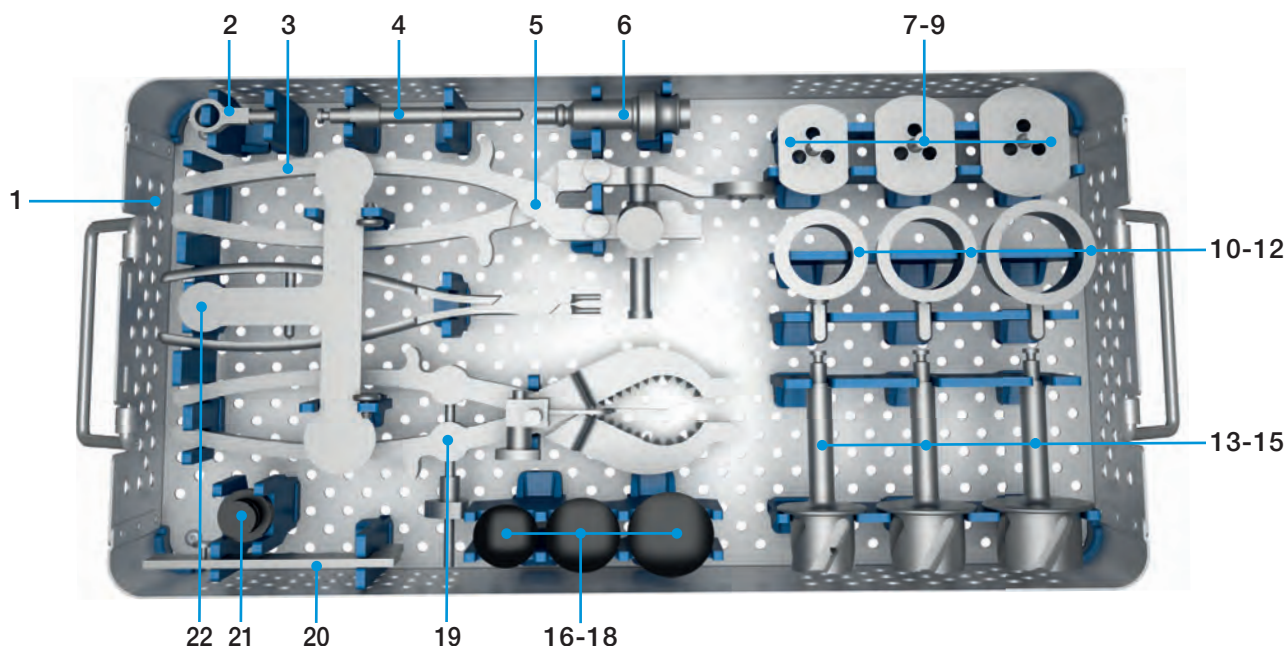
REF	Size	Outer-Ø mm	Height mm
15-2522/30	small (1)	30	8
15-2522/35	medium (2)	35	8
15-2522/40	large (3)	40	8



340-100 Instrumenten-Set for Patella Components, 1-peg,
for Endo-Model Standard – M / – W Knee Prostheses


1	340-016	Tray, empty, 550 x 265 x 50 mm
	05-2002/03	Standard Container N21, only, stainless steel, 575 x 275 x 140 mm (without Illustration)
		Patell Drill Guides for patella holding clamp, for Patella Component 1-peg
2	340-230	Size 30 for 15-2521/30
3	340-235	Size 35 for 15-2521/35
4	340-240	Size 40 for 15-2521/40
5	340-007	Patella Pusher Attachment
6	340-011	Patella Sizing Template
7	340-008	Patella Pusher Insert
8	340-006	Patella Resection Clamp
		Patella Trial Prostheses for Patella Component, 1-peg
9	15-2600/30	Size 30 for 15-2521/30
10	15-2600/35	Size 35 for 15-2521/35
11	15-2600/40	Size 40 for 15-2521/40
12	15-2042	Inserting Forceps for inserting the manipulating bearings, 215 mm
13	340-005	Patella Holding Clamp
14	optional*	Adapter for snap lock chuck, optional (see page 06)
		Patella Reaming Guides for patella holding clamp, for Patella Component, 1-peg
15	340-030	Size 30 for 15-2521/30
16	340-035	Size 35 for 15-2521/35
17	340-040	Size 40 for 15-2521/40
		Patella Reamers for patella reaming guides, with Hudson fitting, for Patella Component 1-peg
18	340-130B	Size 30 for 15-2521/30
19	340-135B	Size 35 for 15-2521/35
20	340-140B	Size 40 for 15-2521/40
21	340-310B	Patella Drill, Ø 10 mm, with Hudson fitting, for Patella Component 1-peg

* Adapter optional: 16-3283/00, 16-3284/00, 16-3285/00

**340-100/01 Instrumenten-Set for Patella Components, 3-peg,
for Endo-Model Standard – M / – W Knee Prostheses**


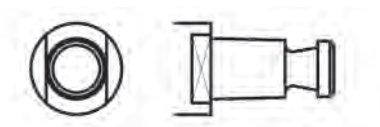
1	340-016/01	Tray, empty, 550 x 265 x 50 mm
2	340-007	Patella Pusher Attachment
3	340-005	Patella Holding Clamp
4	340-306B	Patella Drill for Patella Drill Guides, Patella Component 3-pegs, Ø 6.3 mm, Hudson fitting
5	15-2042	Inserting Forceps for inserting and manipulating the Patella Trial Prostheses, 215 mm
6	optional*	Adapter for snap lock chuck, optional (see page 06)
7	340-230/01	Size 30 for 15-2522/30
8	340-235/01	Size 35 for 15-2522/35
9	340-240/01	Size 40 for 15-2522/40
10	340-030	Size 30 for 15-2522/30
11	340-035	Size 35 for 15-2522/35
12	340-040	Size 40 for 15-2522/40
13	340-130B	Size 30 for 15-2522/30
14	340-135B	Size 35 for 15-2522/35
15	340-140B	Size 40 for 15-2522/40
16	15-2630/30	Size 30 for 15-2522/30
17	15-2630/35	Size 35 for 15-2522/35
18	15-2630/40	Size 40 for 15-2522/40
19	340-006	Patella Resection Clamp
20	65-2000	Townley Femur Caliper
21	340-008	Patella Pusher Insert
22	340-011	Patella Sizing Template

* Adapter optional: 16-3283/00, 16-3284/00, 16-3285/00

Adapter




Hudson fitting

Basic tool connection for patella instruments



Adapter for Snap Lock Chuck

Various adapters to enable compatibility with other equipment connections.

REF	Fitting	
16-3283/00	Jacobs Fitting (E)	
16-3284/00	AO Fitting (D)	
16-3285/00	Harris Fitting (C)	

Sawblades



Sawblades, without offset teeth, 1.24 mm thick

REF wide	REF small	Fitting
317-654/10	317-656/10	Synthes
317-654/11	317-656/11	Aesculap combi
317-654/12	317-656/12	3M
317-654/13	317-656/13	Zimmer/Hall combi
317-654/14	317-656/14	Stryker system 4

Patella Resurfacing is not a necessary part of the method for implantation of a total knee replacement. It is an optional procedure carried out if femoropatellar syndrome is present.

Contraindications:

- Acute or chronic infections, local and systemic insofar as they compromise the successful implantation of a hinged total knee endoprosthesis.
- Allergies to (implant) materials.
- Distinctive muscular, nerve, vascular or other diseases which put the affected limb at risk.
- Insufficient bone integrity which prevents a stable anchorage of the prosthesis.

Account must also be taken of the following:

- Degree of retropatellar arthrosis
- Patient's height and weight
- Pre-existing anterior knee pain

Procedure for Patella Components

The following operating instructions describe the use of the Patella Component and assume the use of the instrument set available for this procedure. Both the “reaming of the patella surface” technique and the “resection of the patella surface” technique are shown.

The description relates to the **1-peg and 3-pegs version** of the knee implants:

- Endo-Model Standard – M / – W Knee Prostheses.

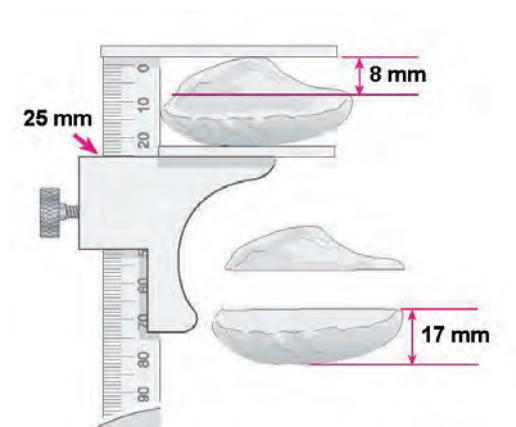
Determination of patella height/patella resection

Using the Calliper (65-2000) allows the height of the patella to be determined. The dimension is established and an amount corresponding to the size of the selected implant subtracted. The remainder equals the target dimension following resection. A minimal residual dimension of 12 mm should be maintained.

Example:

For a patella size 2 (patella diameter 30 mm), the following calculation is performed:

1. patella 25 mm thick,
2. resection 8 mm,
3. 17-mm remaining patella bone.



1-peg and 3-pegs patella version for:

Endo-Model Standard – M / – W

Patella Size	Patella-Ø	Patella Height
1	30 mm	8 mm
2	35 mm	8 mm
3	40 mm	8 mm

Sizing

A patella sizing template corresponding to the implants is available (1).

1- /3-peg Sizing Template for Endo-Model Standard – M / – W



The size of implant to choose is determined by placing the size template centrally on the patella surface (2).



Preparation for patella component

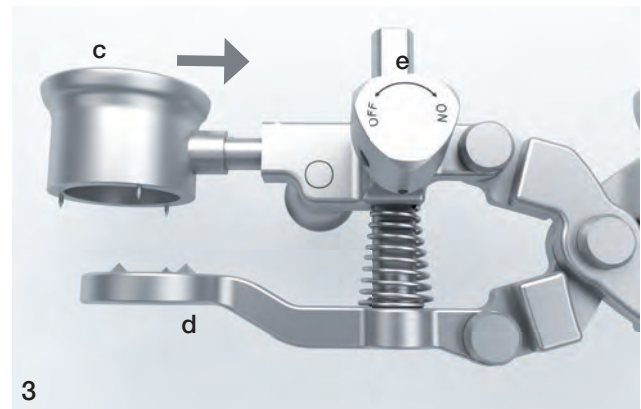
The patella surface can be prepared using the onlay technique with the aid of the patella reamer (as described here) or by resecting with an oscillating saw (see page 11).

Onlay reaming option

Reaming preparation

The reaming guide (c) of the appropriate size is inserted (3) into the patella clamp (d).

Note: Press the button on the side to insert and remove the guide.



A ratchet can be activated on the clamp with the retaining screw (e). By turning the screw to "ON" the clamp is held shut (4). By turning the screw to "OFF", the ratchet is released.



Following removal of the peripheral osteophytes, the patella is clamped with the patella holding clamp, aiming at the most central position possible (5). Good fixation is achieved when the spikes on the guide grip into the bone.



Reaming

The patella reamer is selected (6) to match the implant size which was previously determined and the corresponding reaming guide. The patella reamer has a Hudson drill connection for direct fixation with corresponding power tool connection. It is compatible with other machine systems by using an adapter for snap lock chuck (see page 06).

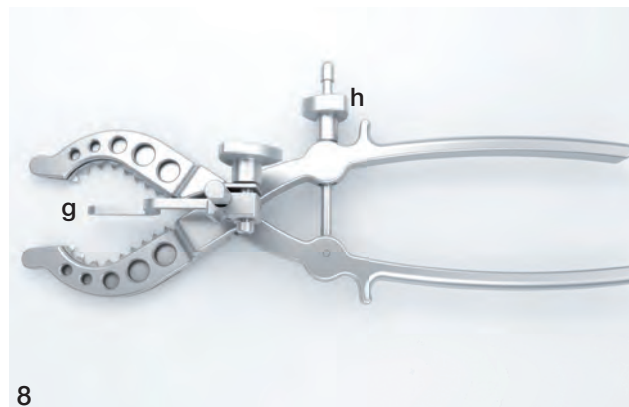


The patella surface is prepared using the patella reamer (f). Reaming depth is verified by means of the mechanical stop on the reamer. In addition, there are marking grooves at 2 mm intervals. The maximum reaming depth is reached when the reamer collar makes contact with the reaming guide (7).

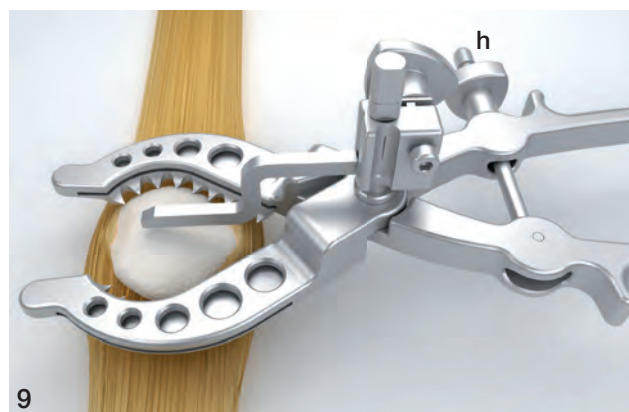


Sawblade resection option

The height of the bone to be resected can be adjusted using the height calliper (**g**) on the resection clamp (**8**).



In doing this, it is important to ensure that the remaining patella is sufficiently thick. The patella is held using the toothed jaws. The sectional plane must lie parallel to the extended patellar tendon and the height calliper must lie on the bone. In order to clamp the patella firmly, the clamp is compressed firmly and fixed using the lateral setting screw (**h**) (**9**).



The resection is carried out using an oscillating saw with a 1.27 mm or 1.24 mm thick sawblade. The saw is guided using the saw slots of the resection clamp (**10**).



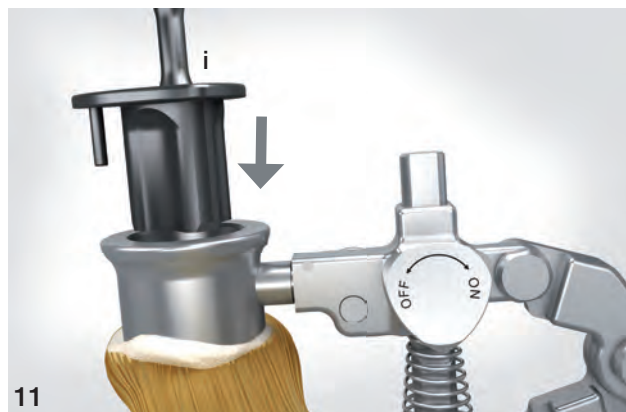
Fixation hole drilling

If the saw blade resection option is selected, the patella is to be fixed with the patella holding clamp as follows:

- Insert the patella reaming guide into the patella holding clamp
- Ratchet function “ON”
- Clamp the patella firmly

Insert the drilling guide (i) for the anchoring holes which corresponds to the chosen implant size into the reaming guide (11).

In doing so, ensure that the guide pin on the drilling guide lies in the opening made for it in the reaming guide. Using the appropriately-sized patella drill (k), drill through the drilling guide until stopped by the depth stop with the appropriately-sized patella drill (12).



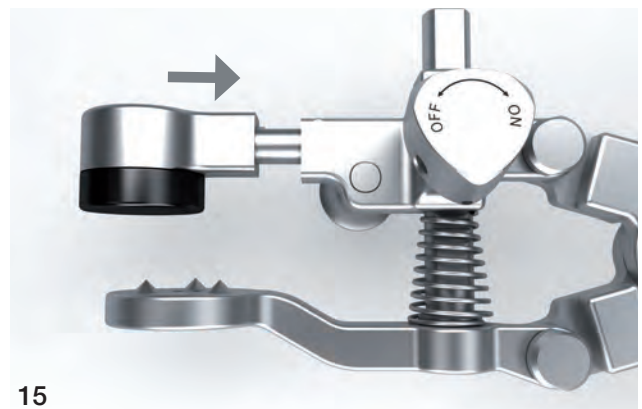
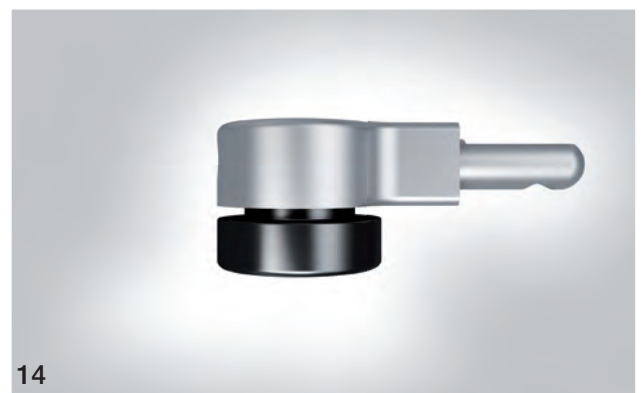
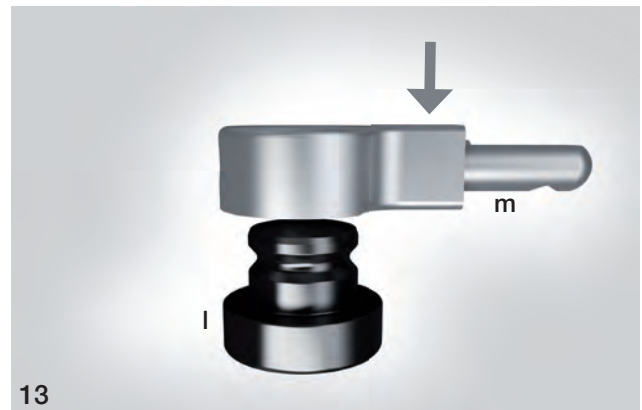
Note

1-peg patella Endo-Model Standard – M / – W	<ul style="list-style-type: none"> • Drill Guide with one pre-drilled guide hole • Patella Drill 10 mm diameter
3-pegs patella Endo-Model Standard – M / – W	<ul style="list-style-type: none"> • Drill Guide with three pre-drilled guide holes • Patella Drill 6.3 mm diameter

Implantation

The reaming guide is removed from the patella clamp. The polyethylene insert* (I) is pressed into the patella pusher inserter (m) (13 +14) and the pusher inserter is then inserted into the patellar clamp (15).

* 1-/ 3-pegs patella **Endo-Model Standard-M/-W**
= 21.5 mm radius.



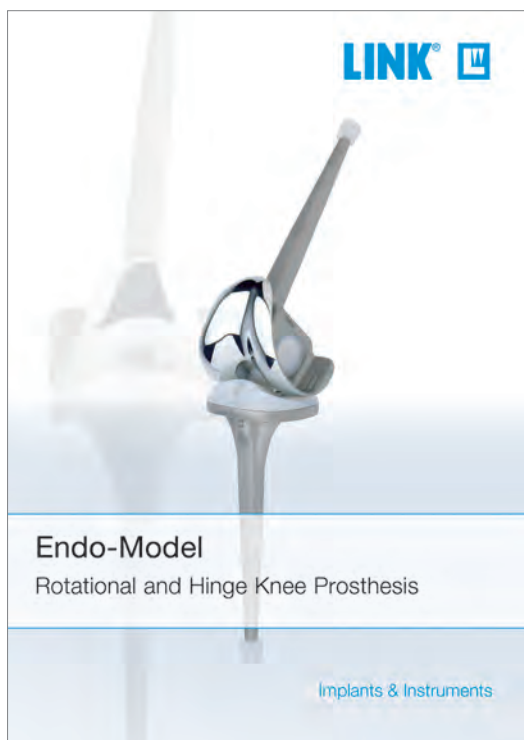
Following extensive rinsing and removal of all impeding soft tissue, the bone cement is applied to the back of the implant, and the implant is placed by hand and pressed on using the patella clamp with the pusher inserter (16).

Caution!

Prepare the bone cement according to the manufacturer's instructions.

Ensure that excess bone cement is completely removed and that no loose particles of bone cement remain in the joint.





Endo-Model
Rotational and Hinge Knee Prosthesis



Endo-Model Standard – M,
Knee System with segmental bone
replacement components



Endo-Model Standard/ -M,
Knee System with segmental bone replacement
components and MIRETO Instrument Set



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

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

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