



Surgical Technique





## EPORE® Cones Cortical for GenuX® MK and ACS® SC Surgical Technique

The EPORE® Cones were developed in co-operation with MB ChB, MSc (Ortho. Engin), FRCS (Tr & Orth) Lee Jeys (Ortho UK, Midland Hip and Knee Clinic, Royal Orthopaedic Hospital NHS Foundation Trust).

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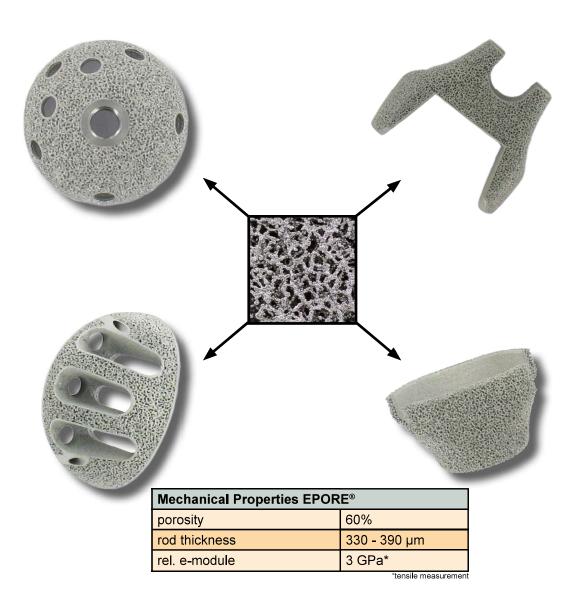
**Nota Bene:** The herein described surgical technique shows the treatment suggested by the author in uncomplicated surgical procedures. However, it is ultimately the operating surgeon's decision, which approach is the most reasonable and effective for the respective patient.

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## **EPORE® - Highly Porous Osseointegrative Structure**

The new production process, <u>E</u>lectron <u>Beam Melting</u> (EBM), that is implemented by implantcast GmbH, offers a quick, flexible and cost-effective production directly from an electronic 3D data set. The innovative, layer-by-layer additive manufacturing technology offers new production dimensions. Among other benefits, it allows high-quality production of medical devices of almost any complex form. Additive manufacturing speeds up the product development, allows design freedom and optimises part structures combined with a high functionality.



EPORE® is a highly porous structure based on titanium alloy ( $TiAI_6V_4$ ). This titanium alloy is an excellent material, as it is ductile, corrosion-resistant and exhibits high fatigue strength. High porosity and low elastic modulus beneficiate the biological ingrowth. The rod structure features rod thicknesses between 330 - 390  $\mu$ m and presents a high similarity to the trabecular bone tissue.



## **System Overview**

The EPORE® Cones cortical are available as femoral and tibial components. The components are designed as augments for large bone defects. The aim is to reconstruct the defective area in order to enable a stable basement for implanting a knee prosthesis.

The EPORE® Cones cortical are designed to achieve a physiologic force transmission from the femoral/tibial implant into the cortical bone. In general the EPORE® Cones cortical feature a pressfit of 0.2mm.

For implantation the EPORE® Cones cortical are implanted cementlessly in the bone. Afterwards the knee endoprosthesis is embedded cementedly in the Cone.

The EPORE® Cones cortical are compatible to the implant systems MUTARS® GenuX® MK, ACS® SC Mobile Bearing and ACS® SC Fixed Bearing. Furthermore, the components can be used universally with third party products, as long as the compatibility is approved in advance by the surgeon (e.g. by using the steril trial implants).

Following points have to be considered when selecting EPORE® Cones femoral or tibial:

- 1. It needs to fit into the defective area without unnecessary removal of intact bone.
- 2. It needs to allow for the optimal position of the components in connection with the offset adapter.



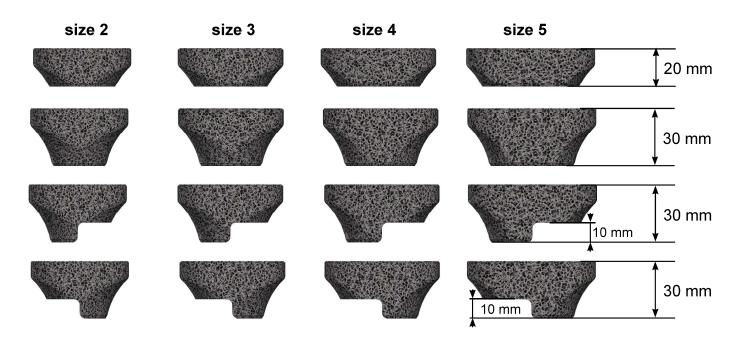
#### **EPORE® Cone Cortical Femoral**

The femoral EPORE® Cones cortical feature a symmetric anatomical design. The components are available as versions for the left and right knee in heights of 30mm, 40mm and 50mm. For each implant height 4 different sizes of femoral EPORE® Cones cortical are available.



### **EPORE® Cone Cortical Tibial**

The design of the EPORE® Cones cortical tibial is symmetrical. Four sizes of tibial EPORE® Cones in height of 20mm and 30mm are available. Additionally components in a stepped version (left and right configuration) are completing the system. The step height is 10mm.





### **Compatibility Overview**

The EPORE® Cones cortical are designed to be compatible with the implant components of the systems MUTARS® GenuX® MK und ACS® SC independet of size. The compatibility is limited by the dimensions of the implant components as well as the stem diameter. It is important that the EPORE® Cone is fully covered by the implant component (in m/l and a/p). Accordingly, the following compatibility results:

### Femoral compatibility:

		EPOR	E® Cone	cortical fe	emoral
	A A	Sz. 2	Sz. 3	Sz. 4	Sz. 5
max. stem dian	neter	18 mm*	18 mm*	18 mm*	18 mm*
ACS® SC	Sz. 2	<b>√</b>	$\checkmark$	( √ )	X
	Sz. 2,5	<b>√</b>	<b>√</b>	( 🗸 )	х
	Sz. 3	$\checkmark$	$\checkmark$	$\checkmark$	(√)
A second	Sz. 4	<b>&gt;</b>	$\checkmark$	<b>&gt;</b>	$\checkmark$
	Sz. 5	<b>√</b>	$\checkmark$	$\checkmark$	$\checkmark$
	Sz. 6	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
GenuX® MK	Sz. 2	<b>✓</b>	$\checkmark$	( ✓ )	X
	Sz. 3	<b>&gt;</b>	<b>√</b>	<b>&gt;</b>	( 🗸 )
746	Sz. 4	<b>√</b>	$\checkmark$	$\checkmark$	$\checkmark$
	Sz. 5	<b>√</b>	<u> </u>	<u> </u>	

<sup>√</sup> compatible

( $\checkmark$ ) limited compatibility. The compatibility is achieved by shifting the EPORE® Cone in m/l.

x not compatible

**Note:** The compatilities given in the chart are measured with an offset of 0 mm and by a centralized position of the EPORE® Cone compared to the implant. By shifting the EPORE® Cone according to the bone defect (decentralized position) the compatibility can be affected. The compatibility can be checked by the use of the sterile trial components.

\* When using stems with diameters lager than 18 mm the order or implantation need to be adjusted (see page 25).



### Tibial compatibility:

		EPO	DRE® Cone	cortical ti	ibial
		Sz. 2	Sz. 3	Sz. 4	Sz. 5
max. stem dian	neter	18 mm*	20 mm*	20 mm*	22 mm*
ACS® SC MB	Sz. 2	<b>&gt;</b>	$\checkmark$	$\checkmark$	X
	Sz. 3	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	Sz. 3,5	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
U	Sz. 4	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	Sz. 5	X	$\checkmark$	<b>√</b>	$\checkmark$
	Sz. 6	X	$\checkmark$	$\checkmark$	$\checkmark$
ACS® SC FB	Sz. 2	<b>√</b>	$\checkmark$	$\checkmark$	X
	Sz. 3	<b>&gt;</b>	<b>√</b>	<b>/</b>	X
	Sz. 3,5	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Sz. 4	$\checkmark$	$\checkmark$	<b>√</b>	$\checkmark$
	Sz. 5	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Sz. 6	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
GenuX® MK	Sz. 2	<b>\</b>	$\checkmark$	<b>√</b>	X
	Sz. 3	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Sz. 4	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Sz. 5	X	$\checkmark$	$\checkmark$	$\checkmark$

compatiblenot compatible

**Note:** The compatility given in the chart are measured with an offset of 0 mm and by a centralized position of the EPORE® Cone compared to the implant. By shifting the EPORE® Cone according to the bone defect (decentralized position) the compatibility can be affected. The compatibility can be checked by the use of the sterile trial components.



In some combinations the compatibility can be achieved by removing the mediolateral crunch plates from the EPORE® Cone, only.

\* When using stems with lager diameters than listed the order of implantation need to be adjusted (see page 25).



### **Pre-operative Planning**

Pre-operative planning and precise surgical techniques are mandatory for optimal results. The instructions and the procedure given in the surgical technique to the system must be adhered to. Familiarity with the recommended surgical technique and its careful application is essential to achieve the best possible outcome.

Before surgery a surgical planning with regard to the dimensions of the prosthetic model and the positioning of the implant components in the bone has to be carried out by the surgeon.

For this purpose, x-ray templates are available:

- <u>Digital templates:</u> Digital templates are included in the database of the common planning systems. For missing templates, please contact the provider of the planning software and request these templates.
- <u>Radiographic templates:</u> Alternatively radiographic templates are available in various scale factors, which can be obtained from your local representative.

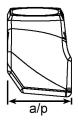
Further the following should be ensured prior to surgery:

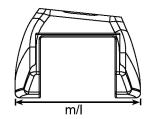
- All implant components required must be available during surgery. An adequate number of various implant components should be available for surgery.
- All instruments required for the implantation must be available and match the corresponding implant components. The insertion instruments must be chosen according to the implant. The implants may only be used with the instruments of the implantcast GmbH. An exception are the standardised instruments used during surgery.



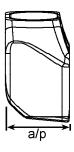
## EPORE® Cone cortical femoral

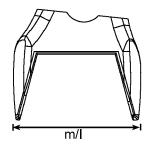






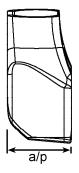
40 mm





size	m/l	a/p	height
2	53 mm	27 mm	30 mm/ 40 mm/ 50 mm
3	55 mm	28 mm	30 mm/ 40 mm/ 50 mm
4	58 mm	33 mm	30 mm/ 40 mm/ 50 mm
5	63 mm	37 mm	30 mm/ 40 mm/ 50 mm

50 mm

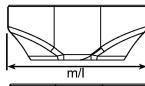




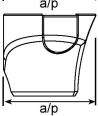
## EPORE® Cone cortical tibial

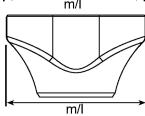
20 mm





30 mm

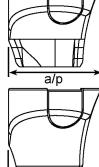


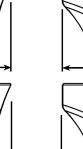


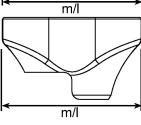
size	m/l	a/p	height
2	51 mm	34 mm	20 mm/ 30 mm
3	55 mm	36 mm	20 mm/ 30 mm
4	60 mm	36 mm	20 mm/ 30 mm
5	67 mm	38 mm	20 mm/ 30 mm

30 mm stepped left

30 mm stepped right









## Surgical technique femoral

#### Attention:

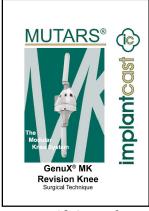
The explained surgical technique is designed for use with the MUTARS® GenuX® MK system. The surgical technique can be used with the ACS® SC system, respectively.

In case of using the EPORE® Cones in combination with third party products the compatibility of the implants need to be ensured. For this purpose sterile trial implants are available (see page 28)

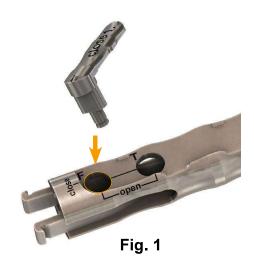
Perform the femoral preparation as described in the surgical technique for GenuX<sup>®</sup> MK until the distal cut is done.

Firstly, the cone impactor has to be assembled as follows, in order to be used with the femoral broaches. It is recommended to start with the smallest broach (size 2).

Insert the locking lever engraved with "close 1." into the hole marked with an "F" for femoral (Fig. 1). Leave both locking levers open (Fig. 2) for further assembling steps.



MUTARS® GenuX® MK Surgical Technique









Place the femoral adapter plate on the cone impactor (Fig. 3). The adapter plate is marked with an on "F" from underneath.



Fig. 4

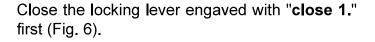
Make sure to position the adapter plate in the correct alignment.

For a left knee, both "L" engravings need to be on the same side (Fig. 4). Respectively, for surgeries of a right knee the two "R" engravings need to be alinged.

The femoral adapter plate is not specific in size.

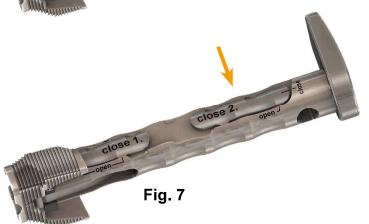


Mount the femoral broach onto the femoral adapter plate (Fig. 5).





Afterwards, close the second locking lever that is engraved with "close 2." (Fig. 7).



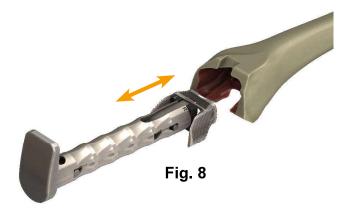


Start to broach the intramedullary cavity of the femur with the before assembled setup (Fig. 8).

Keep on broaching until the correct implant depth is reached.

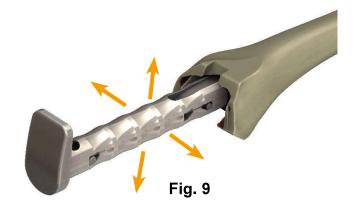
**Note:** The correct implant depth is reached when the distal edges of the broach sit slightly outside the bone.

Accordingly, the jointline is shifted distally.



When the final depth is reached, check the stability of the broach in the bone by moving the impactor carefully in a/p and m/l direction (Fig. 9).

If the stability is not sufficient enough, remove the broach from the bone and repeat the preparation with a broach one size bigger than the previous one.



When a good fit of the broach is ensured, remove the impactor from the broach. Therefore open both locking levers (Fig. 10).

**Note:** Removing the inserter from the broach can be facilitated by reducing the strain of the holding arm. Therefore compress the holders slightly with the fingers.



The broach remains in the bone for further bone preparation steps and trial reduction (Fig. 11).

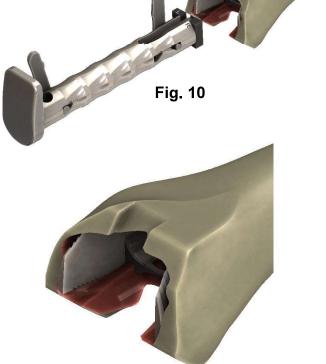
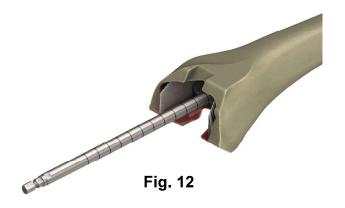


Fig. 11





Insert the last used rigid drill (together with the corresponding drill sleeve) in the bone.

Note: Be aware of the correct reaming depth (see surgical technique for GenuX® MK). After each resection the relevant marking of the reamer needs to be in line with the distal cut. In case of stems of 150 mm or longer, the drill sleeves are mandatory in use!



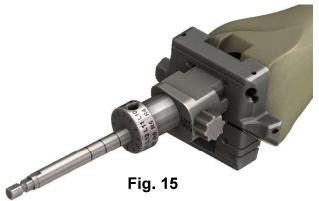
Place the 4in1 cutting block of the appropriate size over the rigid drill (Fig. 13).

When a distal spacer was prepared previously, the magnetic spacers (5 mm or 10 mm) can be mounted onto the 4in1 cutting block.



Place the long stem sleeve on the 4in1 cutting block. Take care of the correct orientation. Subsequently, insert the femoral offset tester (0, 2, 4 or 6 mm) in the long stem sleeve (Fig. 14).





Note: The femoral offset tester will not fit completely into the long stem sleeve preparing for the femoral EPORE® Cones korical 30 mm and 40 mm (Fig. 15). This is no operating error. In this case the offset can be estimated by using the resection check.



Rotate the femoral offset tester to position the 4in1 cutting block on the bone.

Use the resection check to review the anterior and posterior resection plane (Fig. 16).

**Optional:** The rotation of the 4in1 cutting block can be aligned according to the tibial resection by using the femoral positioner (Fig. 17). Therefore, connect the spacer shim 12.5 mm onto the femoral positioner and inser the femoral positioner into the posterior cutting slot of the 4in1 cutting block. If tibial defects are present, use the spacers for for femoral positioner to compensate.

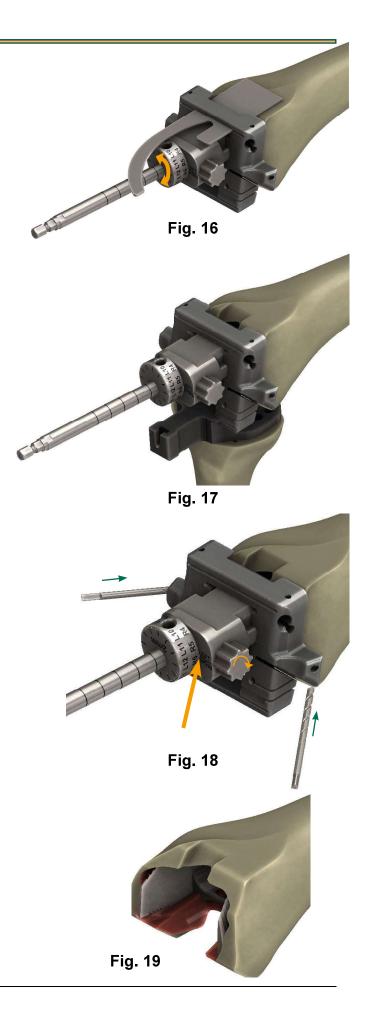
After the optimal position of the 4in1 cutting block is set, fasten the screw on the long stem sleeve up. Fix the 4in1 cutting block with two pins (Fig. 18).

Determine the offset settings on the offset tester (in the example: left knee, 2 mm, 12 o'clock). Keep the settings in mind for assembling of the trial- and implant components.

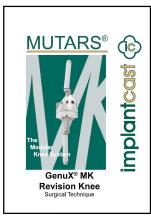
Note: If the pins are blocked by the femoral broach and thus the 4in1 cutting block cannot be fixed properly to the bone, the broach needs to be removed for further preparation steps

Please proceed further with the final steps of the GenuX® MK as described in the surgical technique.

The femoral preparation is finished. The femoral broach remains in the bone for trial reduction (Fig. 19). Continue on page 20







MUTARS® GenuX® MK Surgical Technique

Fig. 20

### **Sugrical Technique tibial**

#### **Attention:**

The explained surgical technique is designed for use with the MUTARS® GenuX® MK system. The surgical technique can be used with the ACS® SC system, respectively.

In case of using the EPORE® Cones in combination with third party products the compatibility of the implants need to be ensured. For this purpose sterile trial implants are available (see page 28).

If necessary, refresh the tibial cut, as described in the MUTARS® GenuX® MK surgical technique.

Firstly, the cone impactor has to be assembled as follows, in order to be used with the tibial broaches. It is recommended to start with the smallest broach (size 2).

Insert the locking lever engraved with "close 1." into the hole marked with an "T" for tibial (Fig. 20).



Leave both locking levers open (Fig. 21) for further assembling steps.



Place the tibial adapter plate onto the Cone impactor (Fig. 22). The tibial adapter plates are size specific and coloured as follows:

size 2	yellow
size 3	red
size 4	green
size 5	blue

Make sure to place the tibial adapter plate in the correct rotatoin. The engravings "L" and "R" on the adapter plate and the cone impactor has to lie on top of each other (Fig. 23).





Fig. 23

Mount the tibial broach onto the tibial adapter plate ( ).





Fig. 25

Close the locking lever engaved with "close 1." first (Fig. 25).

Afterwards, close the second locking lever that is engraved with "close 2." (Fig. 26).







Start to broach the intramedullary cavity of the tibia with the before assembled setup (Fig. 27). Take care of the correct positioning of the broach. The size of the broach needs to be visable anteriorly.

Keep on broaching until the correct implant depth is reached.

**Note:** The correct implant depth is reached when the broach sits slightly outside the bone. Accordingly, the jointline is shifted proximaly.

When the final depth is reached, check the stability of the broach in the bone by moving the impactor carefully in a/p and m/l direction (Fig. 28).

If the stability is not sufficient enough, remove the broach from the bone and repeat the preparation with a broach one size bigger than the previous one.



Fig. 29

When a good fit of the broach is ensured, remove the impactor and the tibial adapter plate from the broach. Therefore open both locking levers (Fig. 29).

**Note:** Removing the inserter from the broach can be facilitated by reducing the strain of the holding arm. Therefore compress the holders slightly with the fingers.

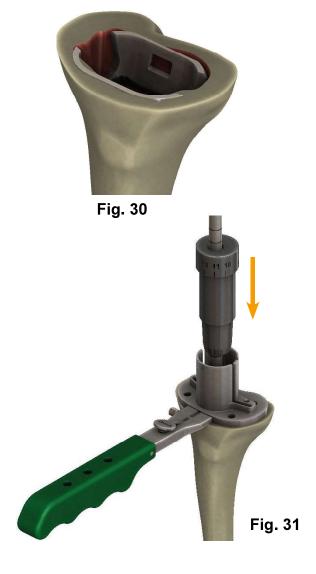




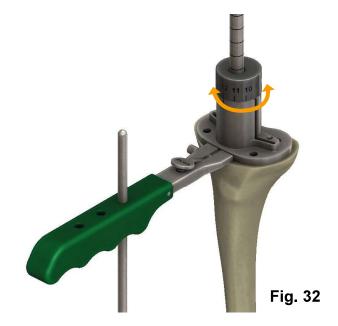
The broach remains in the bone for further preparation and tibial trial reduction. (Fig. 30).

Insert the last used rigid drill in the intramedullary canal and place the tibial reaming guide of the appropriate size on the tibial cut. Use the tibial alignment handle for better guidance of the reaming guide. If necessary, tibial trial spacers can be added to the reaming guide.

Set the tibial offset tester over the rigid drill in the tibial reaming guide (Fig. 31).



Turn the tibial offset tester to achieve the best position of the reaming guide (equal to tibial component) on the tibial bone. An optimal coverage as well as good rotational aligment should be given. Use the external aligment rod to check the rotational aligment (Fig. 32).





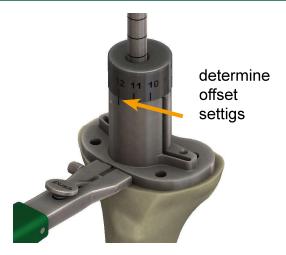


Fig. 33

When the optimal position of the reaming guide is chosen, the offset settings are determined (anteriorly) (Fig. 33).

Keep the offset settings in mind for assembling the trial- and implant components.

The rotational alignment can be marked on the anterior edge of the tibia with Methylen Blue or with diathermy.



Fig. 34

The tibial cone preparation is finished. Leave the cone in the bone for trial reposition (Fig. 34).



### **Trial Reposition**

Assemble the trial components (femoral and tibial) as explained in the surgical technique for GenuX® MK. Pay attention to the correct offset settings, as determined previously.

Insert the trial components trough the broaches into the bone.

(femoral: Fig. 35, tibial: Fig. 36)

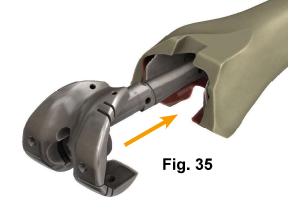




Fig. 36

Fig. 37

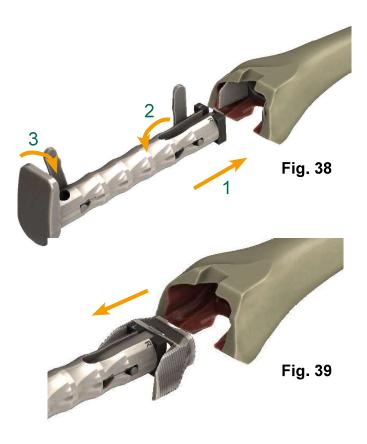


Select the trial PE- insert of the desired type (Mobile-Bearing or Fixed-Bearing) and place it on the tibial trial component. The size of the PE-insert is determined by the size of the tibial component.

Couple the trial femoral component with the trial tibial component by using the GenuX® MK trial coupling. The technique is described in the surgical technique for GenuX® MK (page 30).

Check components for appropriate placement (Fig. 37).





### **Removal of Trial Components**

After trial reduction, remove all trial components from the bone. First, release the femoral trial component from the tibial trial component and remove the trial coupling.

Use the slap hammer combined with the extractor for the femoral component respectively the tibial extractor.

The broaches of the EPORE® cones cortical are removed by using the cone impactor.

#### Femoral:

Assemble the cone impactor as described on pages 10/11. Insert the cone impactor (both locking levers open) in the broach that is still in the bone (Fig. 38, (1)).

Close the locking levers in the shown order (Fig. 38, (2)) and (Fig. 38, (3)).

Remove the broach from the bone (Fig. 39).



#### Tibial:

Assemble the cone impactor as described on pages 15/16. Insert the cone impactor (both locking levers open) in the broach that is still in the bone (Fig. 40, (1)).

Close the locking levers in the shown order (Fig. 40, (2)) and (Fig. 40, (3)).

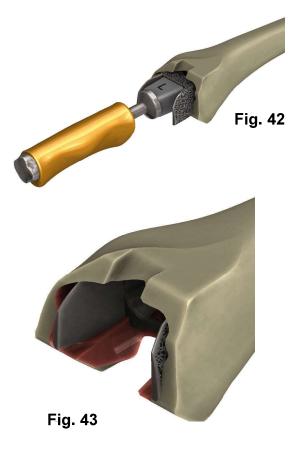
Remove the broach from the bone (Fig. 41).



## **Implantation Femoral**

Implant the EPORE® Cone femoral cementlessly in the femoral bone, first. Use the femoral EPORE® Cone impactor (Fig. 42).

The EPORE® Cones have a press-fit of 0.2 mm (Fig. 43).

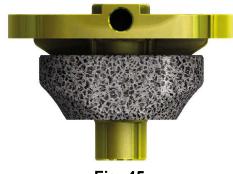


Assemble the offsetadapter (of the appropriate size and rotational allignment) as well as the stem onto the femoral implant.

Cover the inner surface of the femoral implant as well as the inner contour of the femoral EPORE® Cone cortical with bone cement. Insert the femoral implant assembly carefully into the bone. Use the femoral impactor (Fig. 44).







### Fig. 45

### **Implantation Tibial**

Prior to implantation it has to be clarified if the mediolateral crunch plates in the EPORE® cone implant have to be removed to achieve a compatibility with the tibial implant

The compatibility charts for the tibial components of the implant systems ACS® SC MB, ACS® SC FB and GenuX® MK are listet on page 6.

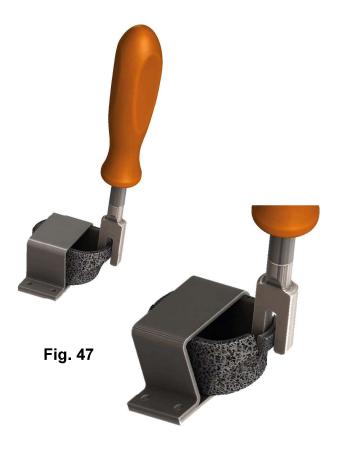




Fig. 46

**Note:** In case of using the tibial EPORE® Cone cortical in combination with third party implants, the compatibility can be verified by the sterile trial components.

The trials are packaged seperately. The mediolateral plugs can be removed respectively to the tibial EPORE® Cone cortical implants.



If the mediolateral crunch plates need to be removed, place the EPORE® Cone cortical tibial underneath the crunch plate holder in the container. Use the crunch plate instrument to remove the plugs (Fig. 47).



Implant the EPORE® Cone cortical tibial cementlessly in the tibial bone, first. Use the tibial EPORE® Cone impactor (Fig. 42).

The EPORE® Cones have a press-fit of 0.2 mm (Fig. 43).



Assemble the offset adapter (of the appropriate size and rotational allignment) as well as the stem onto the tibial implant.

Cover the tibial implant distally as well as the inner contour of the tibial EPORE® Cone cortical with bone cement. Insert the tibial implant assembly carefully into the bone. Use the tibial impactor (Fig. 44).







Fig. 51

Subsequently, place the PE-insert of the desired type (Mobile-Bearing or Fixed-Bearing) on the tibial trial component. The size of the PE-insert is determined by the size of the tibial component.

Couple the femoral component with the tibial component by using the GenuX<sup>®</sup> MK coupling. The technique is described in the surgical technique for GenuX<sup>®</sup> MK (page 33).

The implantation is now finished (Fig. 51).

Note: <u>Implantaion in case of large stem diameters and offsets</u>

In case of using stems with a lage diameter or huge offsets (especially to anterior or posterior), it is possible that the final implant assambly (same for trial assambly) is not fitting through the EPORE® Cone.

In this case it is recommended to implant as follows:

- place the EPORE® Cone onto the implant (femoral ot tibial) before the offsetadapter and the stem are mounted by morse taper.
- pour the EPORE® Cone and cover the bone facing surface of the implant with bone cement.
- implant the assembly as long as the bone cement inside the EPORE® Cone is still malleable. The final inserting of the EPORE® Cone is than done by using the implant inserter carefully on the implantcomponent.



## **Implants**

## **EPORE® Cone cortical femoral 30mm**

mat.: EPORE®; TiAl<sub>6</sub>V<sub>4</sub>

<i>REF</i> 4217-3020 4217-3030	<i>size</i> 2 R 3 R		
4217-3040 4217-3050	4 R 5 R	M 2018!	
4217-3025	Available C	14 2	
4217-3055	4 L 5 L		

## **EPORE®** Cone cortical femoral 40mm

mat.: EPORE®; TiAl<sub>6</sub>V<sub>4</sub>

REF	size
4217-4020	2 R
4217-4030	3 R
4217-4040	4 R
4217-4050	5 R
4217-4025	2 L
4217-4035	3 L
4217-4045	4 L
4217-4055	5 L



## **EPORE®** Cone cortical femoral 50mm

mat.: EPORE®; TiAI<sub>6</sub>V<sub>4</sub>

REF	size
4217-5020	2 R
4217-5030	3 R
4217-5040	4 R
4217-5050	5 R
4217-5025	2 L
4217-5035	3 L
4217-5045	4 L
4217-5055	5 L





## EPORE® Cone cortical tibial 20mm

mat.: EPORE®; TiAI<sub>6</sub>V<sub>4</sub>

REF	size
4217-0022	2
4217-0023	3
4217-0024	4
4217-0025	5



# **EPORE**<sup>®</sup> Cone cortical tibial 30mm mat.: EPORE<sup>®</sup>; TiAl<sub>6</sub>V<sub>4</sub>

REF	size
4217-0002	2
4217-0003	3
4217-0004	4
4217-0005	5



# **EPORE**<sup>®</sup> Cone cortical tibial stepped (30mm) $mat.: EPORE^{@}; TiAI_6V_4$

REF	size
4217-0012	2 R
4217-0013	3 R
4217-0014	4 R
4217-0015	5 R



4217-0032	2 L
4217-0033	3 L
4217-0034	4 L
4217-0035	5 L





## Sterile trial implants

## trial implant for EPORE® Cone cortical femoral 30mm

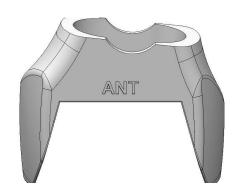
mat.: fine polyamid PA2200

REF 7295-3222 7295-3223 7295-3224 7295-3225	size 2 R 3 R 4 R 5 R	able Q4 2018!	
1295-3214 7295-3215	3 L 4 L 5 L		

## trial implant for EPORE® Cone cortical femoral 40mm

mat.: fine polyamid PA2200

REF	size
7295-3262	2 R
7295-3263	3 R
7295-3264	4 R
7295-3265	5 R
7005 2050	0.1
7295-3252	2 L
7295-3253	3 L
7295-3254	4 L
7295-3255	5 L



## trial implant for EPORE® Cone cortical femoral 50mm

mat.: fine polyamid PA2200

size
2 R
3 R
4 R
5 R
2 L
3 L
4 L
5 L





## trial implant for EPORE® Cone cortical tibial 20mm

mat.: fine polyamid PA2200

REF	size
7295-3202	2
7295-3203	3
7295-3204	4
7295-3205	5



## trial implant EPORE® Cone cortical tibial 30mm

mat.: fine polyamid PA2200

size
2
3
4
5



## trial implant for EPORE® Cone cortical tibial stepped

mat.: fine polyamid PA2200

REF	size
7295-3292	2 R
7295-3293	3 R
7295-3294	4 R
7295-3295	5 R

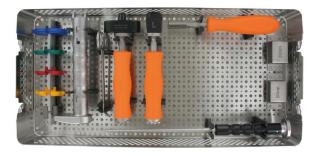
7295-3282	2 L
7295-3283	3 L
7295-3284	4 L
7295-3285	5 L







### **Instrument Containers**



**EPORE® Cone cortical Basic Container** 7295-2040



**EPORE® Cone cortical Tibial Container** 7295-2041



**EPORE® Cone cortical Femoral Container Left** 7295-2042

**EPORE® Cone cortical Femoral Container Right** 7295-2043



**EPORE**<sup>®</sup> Cone femoral offset tester Container 7295-2005



**EPORE® Cone tibial offset tester Container** 7295-2007

**Note:** The instruments are delivered nonsterile.



### **Instruments**

## EPORE® Cone cortical Basic Container (7295-2040)

Impactor for EPORE® Cones cortical 7295-3000



ic-forceps for bipolar head 7960-6020

universal broach 5mm straight

(alternative: Rasp for EPORE® Cone

8005-1600

7295-1029)



Femoral adapter plate for EPORE® Cones cortical 7295-3001

7295-3001

Tibial adapter plate for EPORE® Cones cortical

REF	siz
7295-3002	2
7295-3003	3
7295-3004	4
7295-3005	5



EPORE® Cone cortical Tibial Container (7295-2041)

Broach tibial for EPORE® Cone cortical 20mm

REF	size
7295-3102	2
7295-3103	3
7295-3104	4
7295-3105	5



EPORE® Cone impactor femoral 7295-1020



EPORE® Cone impactor tibial

7295-1010



Broach tibial for EPORE® Cone cortical 30mm

REF	size
7295-3072	2
7295-3073	3
7295-3074	4
7295-3075	5



EPORE® Cone crunch plate Instrument 7295-1030



EPORE® Cone crunch plate holder 20 mm \*

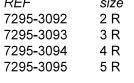
7295-1307

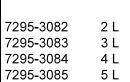


EPORE® Cone crunch plate holder 30 mm \* 7295-1306

\* The instruments are firmly mounted in the instrument tray

Broach tibial for EPORE® Cone cortical 30mm stepped REF size











## EPORE® Cone cortical Femoral Container Left (7295-2042)

Broach femoral for EPORE® Cone cortical 30mm (small)



Broach femoral for EPORE® Cone cortical 40mm

REF	size
7295-3052	2 L
7295-3053	3 L
7295-3054	4 L
7295-3055	5 L



Broach femoral for EPORE® Cone cortical 50mm

REF	size
7295-3032	2 L
7295-3033	3 L
7295-3034	4 L
7295-3035	5 L



## EPORE® Cone cortical Femoral Container Right (7295-2043)

Broach femoral for EPORE® Cone cortical 30mm (small)

REF 7295-3022	size 2 R	04 2018!	
7295-3023	Available	Q4 2018!	
, <sub>200</sub> -3025	5 R		

Broach femoral for EPORE® Cone cortical 40mm

REF	size
7295-3062	2 R
7295-3063	3 R
7295-3064	4 R
7295-3065	5 R



Broach femoral for EPORE® Cone cortical 50mm

REF	size
7295-3042	2 R
7295-3043	3 R
7295-3044	4 R
7295-3045	5 R



## **EPORE®** Cone femoral offset tester Container (7295-2005)

EPORE® Cone offset tester femoral

REF	size
7295-1200	0 mm
7295-1202	2 mm
7295-1204	4 mm
7295-1206	6 mm



## EPORE® Cone tibial offset tester Container (7295-2007)

EPORE® Cone offset tester tibial

REF	size
7295-2200	0 mm
7295-2202	2 mm
7295-2204	4 mm
7295-2206	6 mm





Notes



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