

Surgical technique

# balanSys 1 Peg Patella



For healthcare professional use only. The illustrated image does not represent a connection between the use of the medical device described, nor its performance.

*Preservation in motion*

*Building on our heritage  
Moving technology forward  
Step by step with our clinical partners  
Towards a goal of preserving mobility*

## ***Preservation in motion***

*As a Swiss company, Mathys is committed to this guiding principle and pursues a product portfolio with the goal of further developing traditional philosophies with respect to materials or design in order to address existing clinical challenges. This is reflected in our imagery: traditional Swiss activities in conjunction with continuously evolving sporting equipment.*

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## **Remark**

Please make yourself familiar with the handling of the instruments, the product-related surgical technique and the warnings, the safety notes as well as the recommendations of the instruction leaflet before using an implant manufactured by Mathys Ltd Bettlach. Make use of the Mathys user training and proceed according to the recommended surgical technique.

# Introduction

The balanSys 1 Peg Patella is the inlay patella compatible to the balanSys femur designs, CR, PS and REVISION.



## 1. Indications and contraindications

The balanSys 1 Peg Patella is for retro-patellar restoration in combination with a balanSys BICONDYLAR knee implant or a balanSys REV knee implant. Pay attention to the indications and contraindications of the used balanSys knee implant.

**For further information, please refer to the instructions for use or ask your Mathys representative.**

## 2. Preoperative planning

The balanSys 1 Peg Patella is implanted countersink into the patella bone. It is indicative to measure the thickness of the patella bone before bone resection. A minimal bone stock must remain to prevent fracture.



**Fig. 1**

Evert the patella. Perform circumferential denervation of the synovial edge of the patella with electrocautery. Remove peripheral osteophytes to restore the patella to its normal shape and size. Be careful not to damage tendon insertions on the bone.



**Fig. 2**

Measure the thickness of the patella with the caliper. Ensure for sufficient remaining bone stock. The implant has a thickness of 9 mm and a total height of 17 mm.



**Fig. 3**

Attach the patella clamping ring to the Patella universal pliers.

Grip the everted patella centrally with the patella clamping ring. It is important to avoid tilting of the patella implant. Place the instrument with regards to the pre-determined gliding path of the femoral shield.



Fig. 4

Insert the patella drill sleeve into the patella clamping ring. Drill with the drill bit 8.5 until to the stop.

The drill hole defines the stop for the reamer.

**Remark**

*Slightly medializing of the patella implant can support patella tracking.*



Fig. 5

Assembling of the reamer: Attach the balanSys patella rasp plate (A) to the balanSys patella rasp body (B). The rasp plate is secured with the balanSys patella rasp peg (C). The rasp peg is hand tighten with a feeler plate.

Ensure, that the rasp plate is oriented correctly, and the cam of the rasp body engages with the slot at the rasp plate (see arrow).

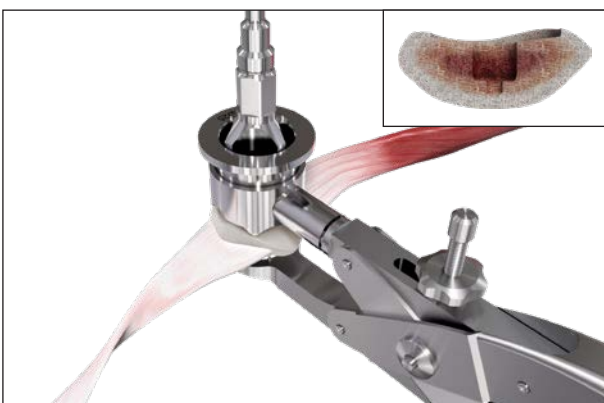
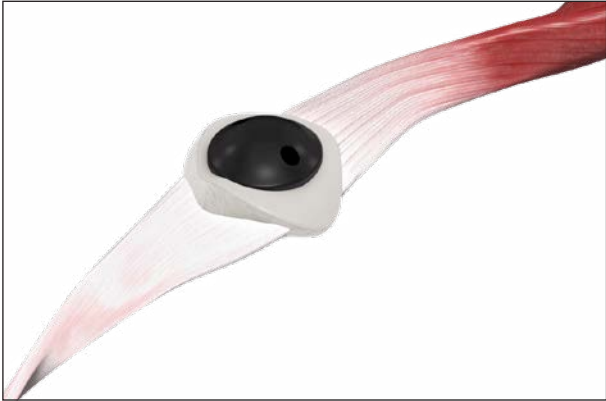


Fig. 6

Remove the patella drill sleeve and insert the balanSys patella reaming guide to the Patella universal pliers.

Ream down to the mechanical stop, which is defined by the drill hole in the step before.

Remove all instruments.



**Fig. 7**

Insert the test patella.

Check the resulting patella thickness with the caliper and the gliding movement in the femoro-patellar joint with respect to centering and impingement.

Thoroughly clean the osteotomy surfaces.



**Fig. 8**

For cementless fixation, Insert the patella implant into the prepared osteotomy. Ensure, that the implant is fully seated. If necessary, use the cementing aid to seat the implant.

For cemented fixation, cut 3–4 fixation lamellas triangular. Apply a layer of cement to the bone or the patella component and insert the patella into the osteotomy.



**Fig. 9**

Set the patella cementing aid into the patella clamping ring. Place the patella cementing aid and fixate it toughly by turning the knob clockwise.

Use a curette to remove all extruded bone cement. After hardening of the cement remove the Patella cementing aid.

After reposing the joint capsule, make a final functional test and check the centered running of the patella.



## 4. Implants



### balanSys Patella 1 Peg flat

Item no.	Description
72.30.0027	balanSys Patella 1 Peg flat 25

**Material:** UHMWPE

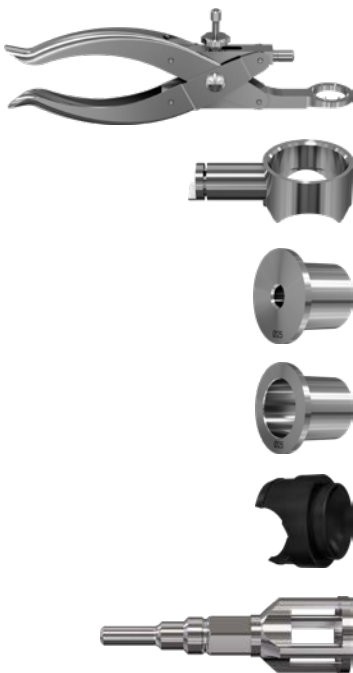
## 5. Instruments

### 71.01.0005A balanSys patella instrum.1 peg flat

#### 71.03.0011 balanSys tray f/patella saddle



#### No picture / 71.03.0013 balanSys lid trial mobile AP



Item no.	Description
71.02.2201	balanSys Patella universal pliers

Item no.	Description
71.02.2202	balanSys patella clamping ring 25 1-peg

Item no.	Description
71.02.2215	balanSys patella drill sleeve 8.5 1-peg

Item no.	Description
71.02.2214	balanSys patella reaming guide 25 1-peg

Item no.	Description
71.02.2213	balanSys patella cementing aid 1-peg

Item no.	Description
71.02.2206	balanSys patella rasp body 25 1-peg



Item no.	Description
71.02.2208	balanSys patella rasp plate 25 1-peg

Item no.	Description
71.02.2218	balanSys patella rasp peg 8.5 1-peg

Item no.	Description
71.02.0027	balanSys trial patella 1-peg 25

Item no.	Description
71.02.3009	balanSys drill bit 8.5

Item no.	Description
71.02.3002	balanSys Patella calliper

## 6. Symbols



Manufacturer

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