Surgical Technique 5-in-1 Conventional Instrumentation





ANATOMIC®
Primary Total Knee System
Fixed bearing
Cemented or cementless

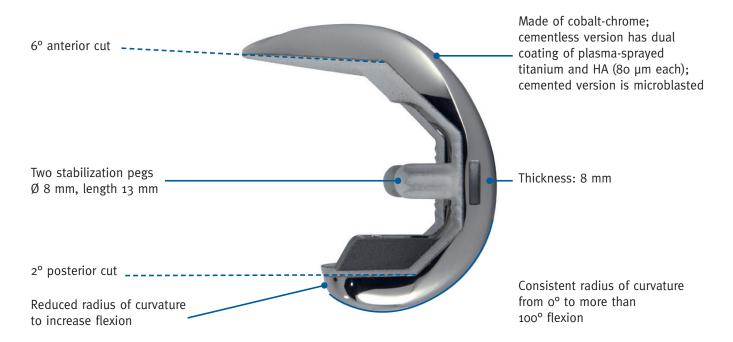
The ANATOMIC® TKS is a PCL-sacrificing, posterior-stabilized, fixed bearing implant for primary knee arthroplasty.

Its mediolateral coverage matches the morphology of the femur. Stability is provided:

- in extension thanks to a congruent anterior rim
- in flexion thanks to a late contact between the cam and the spine of the posterior-stabilization mechanism



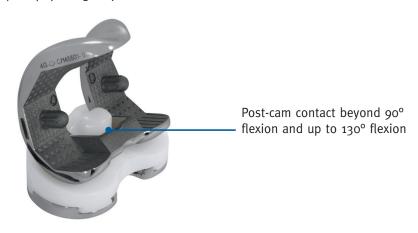
1. Femoral component:



Trochlear groove lateralised by an average of 2.3 mm



Asymmetrical contact surfaces:
✓ quasi-physiological joint kinematics



Polyethylene patellar implant available in two versions:

Onset patellar implant - cemented

Inset patellar implant - cemented



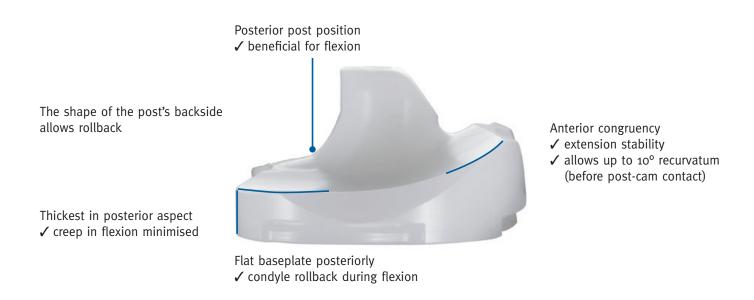
Distance between pegs changes based on size



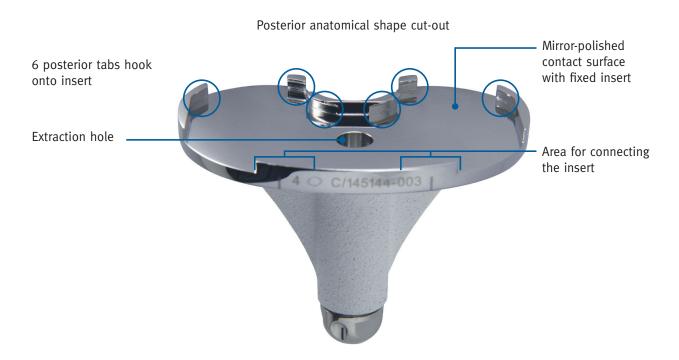
2. Tibial component:

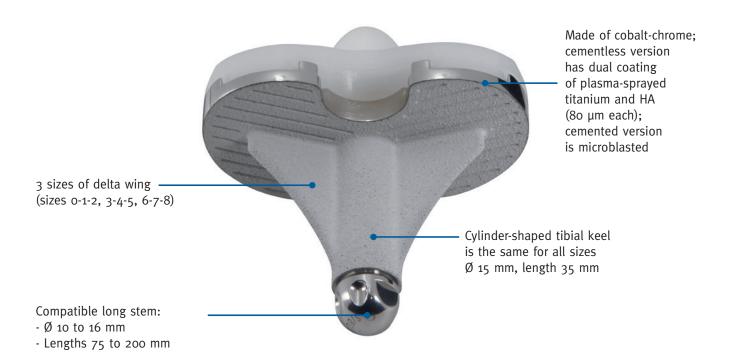
Fixed-bearing insert:





Tibial baseplate:



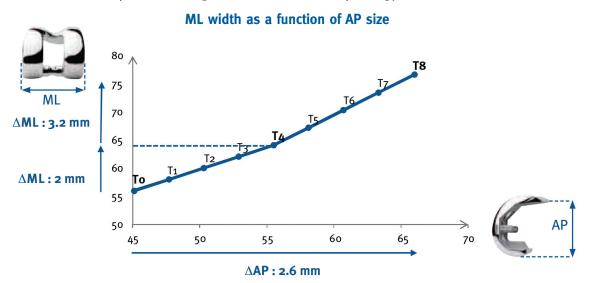


3. Product range:

• Femoral components:

- Cemented: 9 sizes (o and 8 are optional)
- Cementless: 9 sizes (o and 8 are optional)

Medio-lateral implant coverage matches bone morphology:



Patellar components:

- Onset patellar implant cemented: Ø 30, 33 and 36 mm
- Inset patellar implant cemented: Ø 23, 26 and 29 mm

Tibial components:

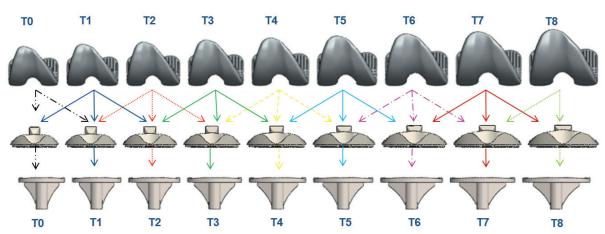
- Cemented: 9 sizes (o and 8 are optional)
- Cementless: 9 sizes (o and 8 are optional)
- Inserts: 9 sizes (o and 8 are optional)
 6 heights (10, 12, 14, 16, 18 and 20 mm)



AP Difference between sizes: 2.3 mm

Difference between sizes: 3.5 mm

4. Components compatibility:



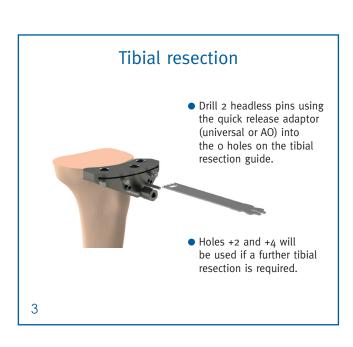
Overview of instrumentation

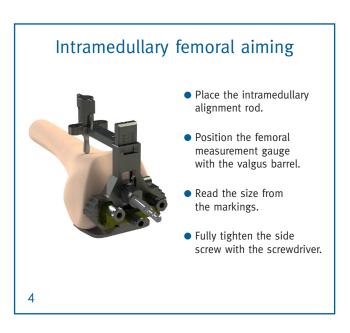
- This surgical technique relates to the ANATOMIC® instrumentation used with the standard 5 in 1 femoral resection instrumentation or the IMA (Instrumentation Minimal Approach) 5-in-1 femoral resection instrumentation to implant the ANATOMIC® TKS.
- The instrumentation can be used either:
 - without navigation (conventional method)
 - with navigation (by adding the Universal Knee Navigation Tools)
 - with the customised i.M.A.G.E.® instrumentation (by adding the i.M.A.G.E.® 5-in-1 tools).

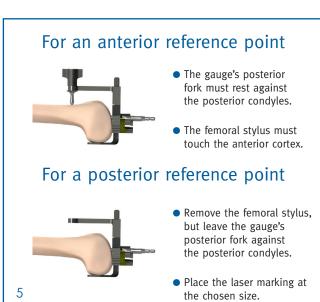
Summary of surgical technique

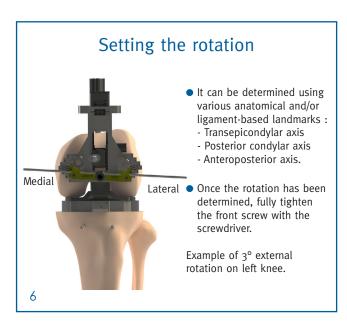
Assemble on the bracket the slide bar with the right or left tibial resection guide. Place the entire assembly on the intramedullary rod.



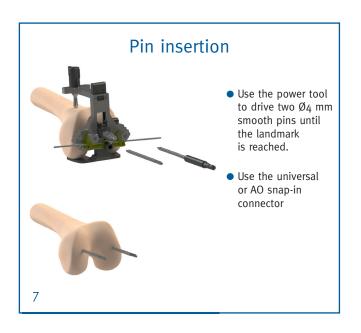


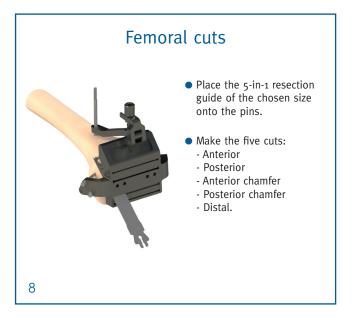


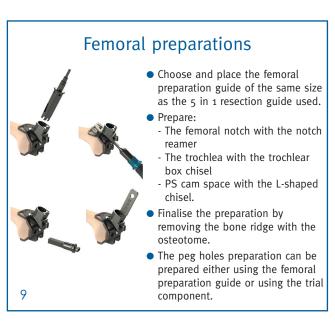


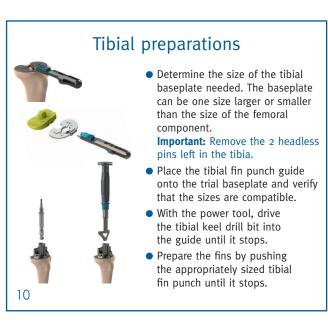


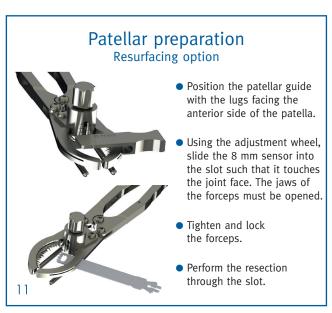
Summary of surgical technique

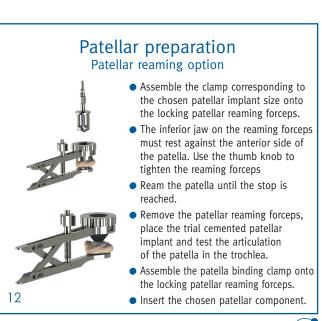
















Pre-operative planning

Radiographs and templates are used to evaluate the following:

Bone-related elements

On the tibia: Choice between intra- or extra-medullary alignment method.

Lateral and A/P position of the entry point for the intramedullary rod.

Match between the tibial keel and fins and the metaphysis

(e.g. following osteotomy). Presence of osteophytes.

Magnitude of wear in each compartment. Potential need for a tibial extension stem.

Estimated tibial baseplate size and insert height.

On the femur: Lateral and A/P position of the entry point for the intramedullary rod.

Presence of posterior osteophytes.Femoral component size estimation.

On the patella: Condition of structure.

Thickness.

Height relative to the joint line.

• Ligament-related elements:

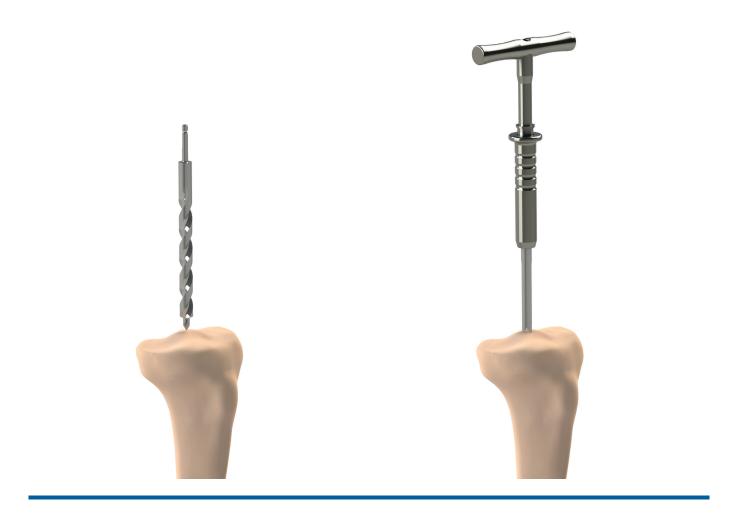
Assessment of ligament balance using stress X-rays.

REMINDER: This surgical technique describes how to use the instrumentation properly.

The surgeon is fully responsible for choosing the surgical approach and technique.

NOTE: The provided templates have a 1:1 scale.

Make sure the template scale matches the X-ray scale.





Intramedullary tibial aiming: landmarks

- Place the knee in hyperflexing position and dislocate the tibia forward.
- Based on the pre-operative planning, make a hole in the middle of the medullary canal using the step drill bit.
- Place the 400 mm long intramedullary rod onto the T wrench and insert it into the canal; the landmark must always be visible.

NOTE: If the rod cannot be inserted, use the 250 mm intramedullary rod.

Intramedullary tibial aiming

- Attach the tibial slide bar and the resection guide (left or right) together onto the bracket.
- Insert this entire unit onto the intramedullary rod, adjust its rotation relative to the anterior tibial tuberosity and then impact the tabs.
- Clip the tibial stylus onto the resection guide (make sure the clip is fully engaged).
- Set the resection height by using the stylus to palpate either the:
 - healthy side (10 mm cut relative to the chosen point),
 - worn side (o mm cut relative to the chosen point (exit level of the saw blade)).

For other resection heights, use the 2 mm markings on the tibial slide bar.

• Verify the height of the bone cut with the resection gauge.

OPTIONAL: To determine if the tibial slide bar is perpendicular to the tibial cut, slide the universal handle onto the slide bar and use the alignment gauge to verify the alignment.

• Place the pins in the o mm holes (with the universal or AO snap-in connector).





Extramedullary tibial aiming

- Attach the tibial slide bar and the resection guide (left or right) together onto the bracket.
- Assemble the malleolar clamp with the extramedullary aiming column and with the slide bar.
- Place the malleolar clamp around the ankle, and then place the bracket on the intercondylar eminence.
- Set the rotational and sagittal alignments before impacting the tabs.
- Clip the tibial stylus onto the resection guide (make sure the clip is fully engaged).
- Set the resection height by using the stylus to palpate either the:
 - healthy side (10 mm cut relative to the chosen point),
 - worn side (o mm cut relative to the chosen point (exit level of the saw blade)).

For other resection heights, use the 2 mm markings on the tibial slide bar».

• Verify the height of the bone cut with the resection gauge.

OPTIONAL: To determine if the tibial slide bar is perpendicular to the tibial cut, slide the universal handle onto the slide bar and use the alignment gauge to verify the alignment.

Place the pins in the o mm holes (with the universal or AO snap-in connector).

Combined tibial aiming

- Based on the pre-operative planning, make a hole in the middle of the medullary canal using the step drill bit.
- Place the 400 mm long intramedullary rod on the T wrench and insert it into the canal; the land-mark must always be visible.

NOTE: If the rod cannot be inserted, use the 250 mm intramedullary rod.

- Attach the tibial slide bar and the resection guide (left or right) together onto the bracket.
- Assemble the malleolar clamp with the aiming column and with the slide bar.
- Place the malleolar clamp around the ankle, and then place the bracket on the intercondylar eminence.
- Set the rotational and sagittal alignment before impacting the tabs.
- Clip the tibial stylus onto the resection guide (make sure the clip is fully engaged).
- Set the resection height by using the stylus to palpate either the:
 - healthy side (10 mm cut relative to this reference)
 - worn side (o mm cut relative to the exit level of the saw blade)

For other resection heights, use the 2 mm markings on the tibial slide bar.

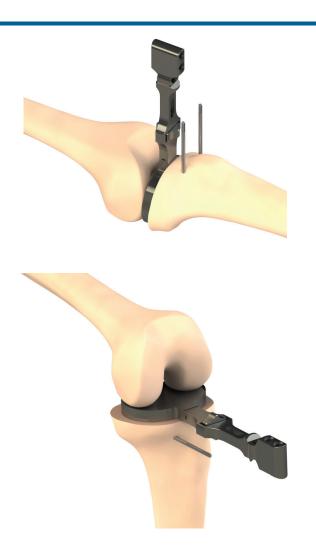
• Check the bone cut height with the resection gauge.

OPTIONAL: To determine if the tibial slide bar is perpendicular to the tibial cut, slide the universal handle onto the slide bar and use the alignment gauge to verify the alignment.

• Place the pins in the o mm holes (with the universal or AO snap-in connector).







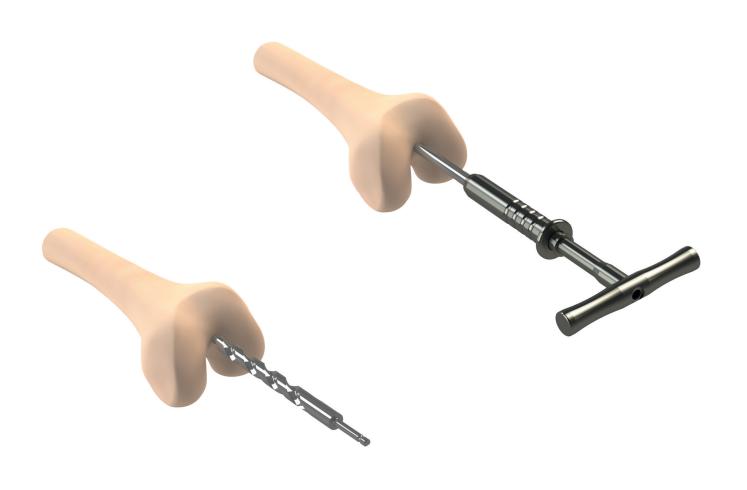
Tibial cut

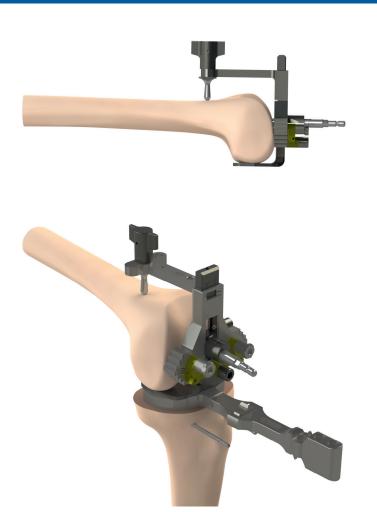
- Loosen the screw in the tibial resection guide.
- Place the «T» end of the slaphammer into the opening on the tibial bracket and then remove the entire intra- or extra-medullary assembly.
- Place the resection guide flush with the anterior tibial cortex.
- Use three converging headed pins to stabilise the resection guide.
- Make the tibial cut.
- Remove the headed pins with the pin extractor.
- Slide the resection guide off the pins, by leaving the pins in place in case a recut was necessary (the +2 and +4 holes will be used at that time).

NOTE: Depending on the bone quality, a 145 mm long, \emptyset 3,2 mm drill bit can be used to make pilot holes for the pins.

Flexion and extension gaps

- It is then possible to check gaps using a 10 mm spacer mounted on the universal handle which may accommodate extramedullary alignment rods.
- 2 mm and 4 mm spacers may also added to the 10 mm spacer to improve ligament tension.





Intramedullary femoral aiming

- Bend the knee at 90°.
- Remove any peripheral osteophytes.
- Clear out tissues to access the anterior cortex.

OPTIONAL: Mark the anteroposterior axis.

- Based on the pre-operative planning, locate the entry point on the femoral medullary canal, and drill a hole into it using a step drill bit.
- Place the 400 mm long intramedullary alignment rod on the T wrench, and insert it into the canal; the landmark must always be visible.

NOTE: If the rod cannot be inserted or there is a pre-existing THA, use the 250 mm intramedullary rod instead.

Femoral A/P measurement

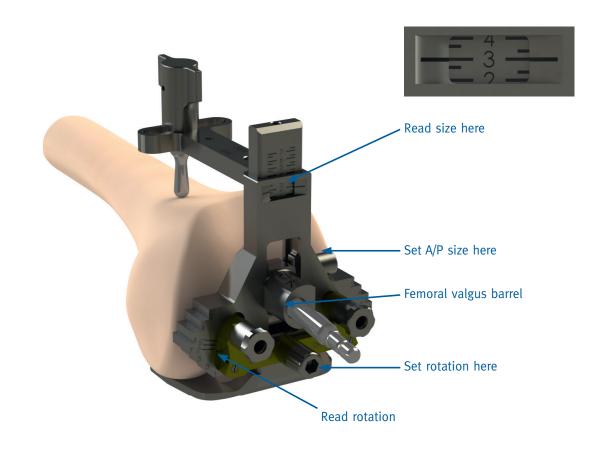
- Position the femoral measurement gauge with the valgus barrel (angle and side as determined pre-operatively) or the optional gap balancing simulator (see option on pages 46-47) on the intramedullary alignment rod.
- Ensure it is in contact with at least one of the distal condyles.
- Make sure the posterior fork rests on the two posterior condyles.
- Place the femoral stylus on the anterior cortex, and move it side to side as needed.

NOTE: Push and turn the stylus simultaneously to assemble it.

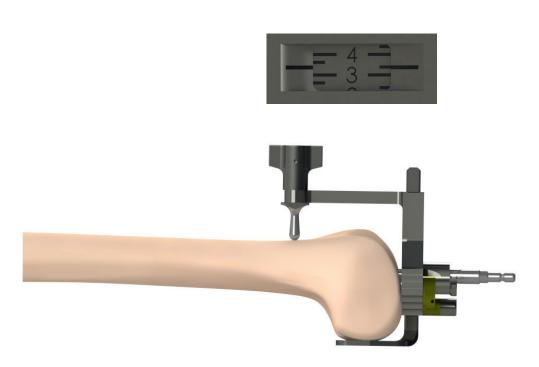
• Use the H₅ screwdriver to tighten the side screw and set the anteroposterior size.

NOTE: For patients with a non-reducible flexion deformity, a distal femoral precut can be made (see pages 48-49)

- Place the 7 mm spacer between the gauge's posterior fork (3 mm thick) and the tibial cut to simulate a 10 mm thick tibial cut.
- The 2 mm or 4 mm spacers may be added to the 7 mm spacer to further refine the ligament tension.
- Evaluate the laxity with the knee flexed.



Example of reading between two sizes



Femoral component size selection

- Read the size from the markings.
- Two scenarios may occur:
 - You can read an exact size: The anterior and posterior reference points will be used simultaneously. The thickness of the bone cut will be equal to the thickness of the implant: 8 mm posteriorly.

2 The reading is between two sizes:

The next larger or smaller size can be used with either the anterior or the posterior reference point.

This is possible because of the 2,6 mm increment between sizes and the 6° anterior cut. It is generally recommended to choose the smallest size.

• For an anterior reference point:

The gauge's posterior fork must stay in contact with the posterior condyles.

The femoral stylus must touch the anterior cortex.

The measured gap (millimeters) is then factored into the posterior condyle cut.

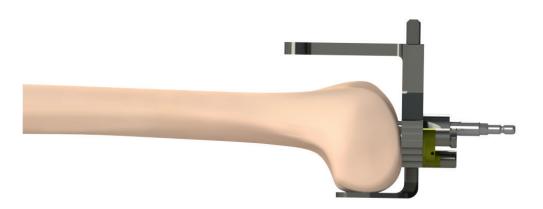
For example, in the scenario shown on the previous page, where the reading corresponds to Size 3 + 1 mm or Size 4 - 2 mm:

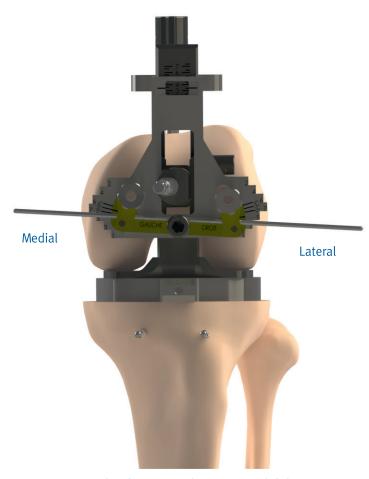
- **Smaller size selected** = 9 mm posterior cut (for an 8 mm implant thickness) Increases gap in flexion
- Larger size selected = 6 mm posterior cut (for an 8 mm implant thickness)

 Decreases gap in flexion

Example of reading between two sizes







Example of 3° external rotation on left knee

• For a posterior reference point:

Remove the femoral stylus, but leave the gauge's posterior fork against the posterior condyles. Place the laser marking on the chosen size.

Fully tighten the side screw with the screwdriver.

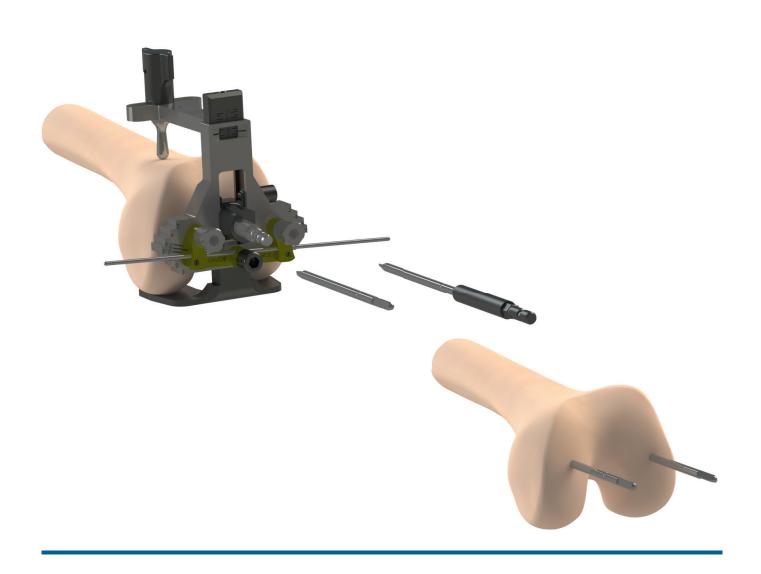
The measured gap (millimeters) is then factored into the anterior cut.

For example, in the scenario on the previous page where the reading corresponds to Size 3 + 1 mm or Size 4 - 2 mm:

- **Smaller size selected** = 8 mm posterior cut (for an 8 mm implant thickness). Anterior cut will be 1 mm lower due to the 6° anterior cut. Flexion gap is maintained and loads on patella are reduced.
- Larger size selected = 8 mm posterior cut (for an 8 mm implant thickness). Anterior cut will be 2 mm higher. Flexion gap is maintained and loads on patella increase.

Setting the rotation

- The rotation can be determined using various anatomical and/or ligament-based landmarks.
- Anatomical landmarks:
 - Transepicondylar axis (TEA),
 - Posterior condylar axis,
 - Anteroposterior axis.
- Ligament-based landmarks:
 - A gap balancing simulator is available upon request (see pages 46-47).
- Once the rotation (o°, 3° or 6°) has been determined, place the drill guides in the measurement gauge at the appropriate locations for the operated side. Fully tighten the front screw with the screwdriver.





Pins insertion

- Use the power tool to drive two Ø4 mm smooth pins into the drill guides placed on the measurement gauge until the landmark is reached.
- Use the universal or AO snap-in connector to connect the pins to the handpiece.
- Remove the two drill guides, the intramedullary rod, and the measurement gauge.

COMMENT: The universal connectors can also be used with the universal T wrench.

Femoral cuts

- Place the 5-in-1 resection guide of the chosen size onto the pins.
- Make sure the guide touches at least one of the distal condyles.
- Position the anterior femoral resection guide stabilizer and secure it with a pin (unicortical).
- Starting with the side that is touching the distal condyle, secure the 5-in-1 guide with four headed pins.
- Remove the two distal pins.
- Make the five cuts:
 - Anterior
 - Posterior
 - Anterior chamfer
 - Posterior chamfer
 - Distal
- Remove the headed pins with the pin extractor and then remove the resection guide.

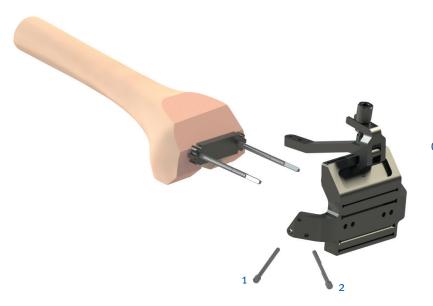
NOTE: MIS 5-in-1 resection guides are available upon request (see pages 48-49).

NOTE: Depending on the bone quality, a 145 mm long, \emptyset 3,2 mm drill bit can be used to make pilot holes for the pins.





Guide size 3



Guide size 2

At this point in the procedure, all cuts have been made.

The flexion and extension gaps can be verified with the 18 mm spacer (10 mm for the tibial cut + 8 mm for the femoral component).

The 2 mm and 4 mm spacers may be added to the 18 mm spacer if necessary.

Various scenarios may be encountered

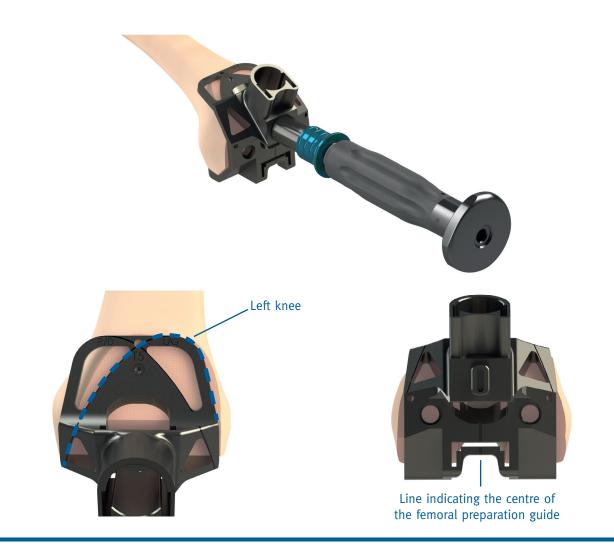
OBSERVATION	SOLUTION		
Knee has acceptable gaps in flexion and extension.	Determine insert height.		
Knee is tight in flexion and extension.	Perform the tibial cut again to remove an additional 2, or 4 mm of bone; use the pins that were left in the femur (see pages 18-19).		
Knee is tight in extension, but acceptable in flexion.	Repeat the femoral cuts using the 4 mm or 6 mm blocks (see below).		
Knee has acceptable gaps in extension, but is tight in flexion.	Select a smaller femoral component and redo the cuts using the 8 mm block (see below).		

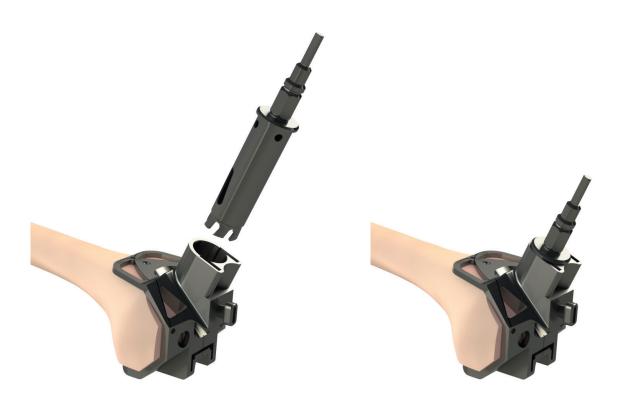
Redoing the distal femoral cut

- Reintroduce the two Ø4 mm pins.
- Position the appropriate block on these pins.
 - The 6 mm thick block will lead to a 2 mm re-cut
 - The 4 mm thick block will lead to a 4 mm re-cut
- Place the initial 5-in-1 resection guide flush against the block.
- Add the femoral resection guide stabilizer.
- Secure it by placing two Ø4 mm pins in the most posterior holes on the guide and two headed pins in the most anterior holes (see picture).
- Remove the two Ø4 mm pins and the block.
- Perform the cuts.

Changing sizes

- Reintroduce the two Ø4 mm pins.
- Place the 8 mm block onto the two Ø4 mm pins.
- Place a smaller 5-in-1 resection guide flush against the block.
- Add the femoral resection guide stabilizer.
- Secure it by placing two Ø4 mm pins in the most posterior holes on the guide and two headed pins in the most anterior holes (see drawing).
- Remove the two Ø4 mm pins and the block.
- Perform the cuts.





Femoral preparation guide placement

- Choose the same size of femoral preparation guide as the 5-in-1 resection guide used previously.
- Place the universal handle on the oval clip by simultaneously pushing and turning the handle one-quarter turn.
- Place the femoral preparation guide onto the femur. This guide has the same mediolateral dimensions as the replacement femoral component. Use the two windows on the anterior face to help position the guide:
 - The outer (lateral) side of the guide corresponds to the outer edge of the replacement femoral component
 - The inner (medial) side of the window corresponds to the inner edge of the replacement femoral component (see figure on opposite page).
- The guide can be centred in the medio-lateral direction by aligning the line at the centre of the guide over the posterior intercondylar notch.
- Secure the femoral preparation guide with three headed pins.
- Remove the universal handle.

Femoral notch preparation

- Select the same size of notch reamer as the preparation guide.
- Push the reamer into the guide until it stops.





Femoral trochlea preparation

- Select the trochlear box chisel corresponding to the operated side and assemble it with the universal handle.
- Prepare the trochlea by inserting the box chisel into the guide.

IMPORTANT: Make sure the box chisel is properly oriented from bottom to top.

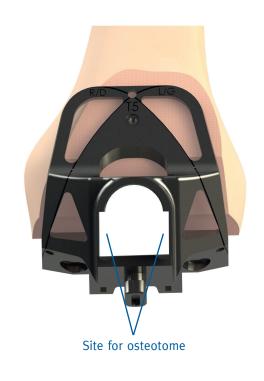
Postero-stabilisation cam preparation

- Assemble the L-shaped chisel with the universal handle.
- Prepare the postero-stabilisation cam space by pushing the L-shape chisel into each side of the guided area. Impact the chisel until it reaches the line corresponding to the size of the guide being used (guide entrance).
- Mark the entry point for the two pegs with the drill bit with stop while making sure the bit is well-aligned with the pegs.

NOTE: The pegs can be prepared on the trial femoral component.







CÔTÉ ÉCHANCRURE NOTCH SIDE T3 T4 T5





Final femoral preparation

- To remove the bone ridge between the distal cut and reamed notch:
 - Select an osteotome of the same size as the preparation guide
 - Push the osteotome into each of the two slots on the outside of the reamer hole until it stops; make sure the «NOTCH SIDE» label faces the notch when pushing in the osteotome.

NOTE: If the osteotome is difficult to pull out, place the T end of the slap-hammer into the hole.

 Remove the three headed pins using the pin extractor and extract the preparation guide using the universal handle.

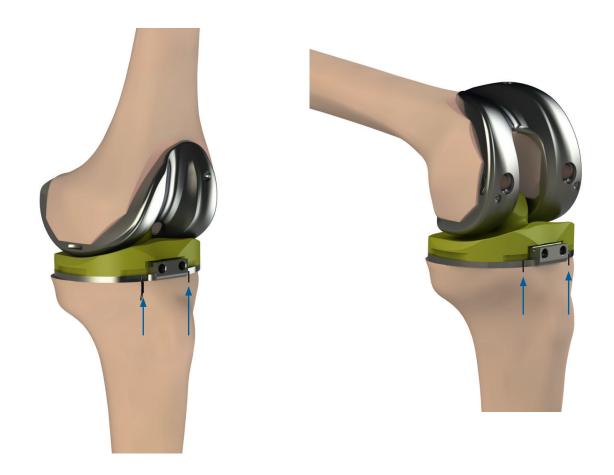
Placement of trial femoral component

- Select the appropriate side and size of trial femoral component.
- Impact the trial femoral component using the femoral component holder, adjusting the medio-lateral position as needed.

NOTE: If all the femoral peg holes have already been made, place the trial pegs into the trial femoral component before connecting it to the holder. This will make it easier to achieve the correct medio-lateral position during impaction.

- Finish impacting the trial component using the femoral component impactor and universal handle.
- If the peg holes were not prepared using the femoral preparation guide:
 - Use the drill bit with stop to make first peg pilot hole
 - Insert the trial peg
 - Make the second peg pilot hole
 - Insert the second trial peg
- Any posterior osteophytes can be removed using the osteotome that matches the trial femoral component size.





Placement of trial tibial baseplate

- Determine the size of the tibial baseplate needed. The baseplate can be one size larger or smaller than the size of the femoral component.
- Position the trial tibial baseplate onto the tibial cut. The tibial baseplate handle can be used.
- Once the size has been selected, remove the baseplate handle, place the same size of insert and reattach the baseplate handle. The lugs on the handle help secure the insert to the trial baseplate. In addition, the handle can be used with an extramedullary alignment rod to verify the rotation, slope and perpendicular alignment of the tibial cut.

IMPORTANT: Remove the 2 headless pins left in the tibia.

Preparation of tibial anchoring points

- Place the assembled tibial components under the trial femoral component and move the knee through a flexion/extension cycle to let the baseplate seat itself underneath it (the handle can be removed).
- Pick a different insert height if needed.
- Use electocautery to mark the baseplate position on the tibia using the two lines on the baseplate.
- Remove the assembled tibial components and replace the baseplate (without the insert) using the marks made on the tibia as a guide.
- Secure the baseplate with two 30 mm headed pins.





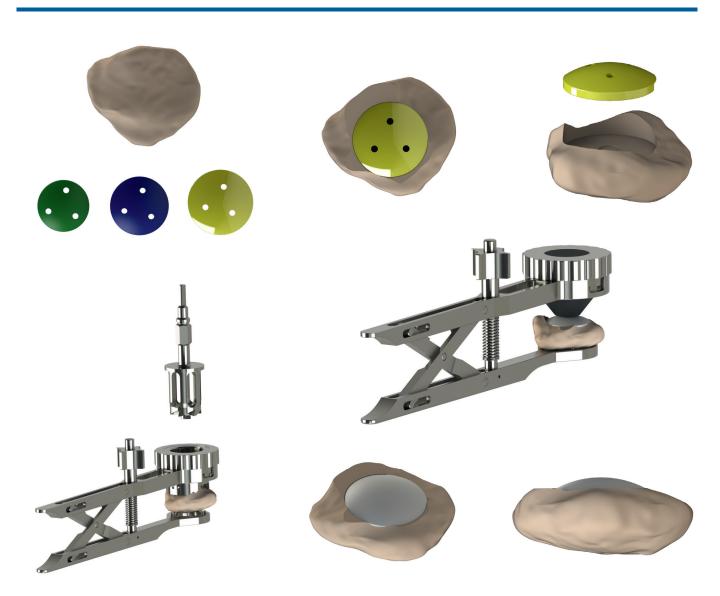




Tibial preparation

- Place the tibial fins punch guide onto the trial baseplate and verify that the sizes are compatible.
- Handles can be secured to the sides of the tibial fins punch guide to stabilise the entire assembly during the various preparation steps.
- With the power tool, drive the tibial keel drill bit into the guide until it stops.
- Prepare the fins by pushing the appropriate size of tibial fins punch (assembled with the universal handle) until it stops.
- Remove all the instruments using the baseplate handle and the pin extractor.





Patellar preparation

Patellar resection option

After clearing the area around the patella,

- Place the clamp so the two lugs are on the anterior side of the patella.
- With the clamp jaws open, bring the 8 mm probe into contact with the articular surface using the adjustment knob.
- Lock the clamp.
- Evaluate remaining bone.
- Push the saw blade into the slot to perform the cut.
- Use the drilling templates to determine the size of patellar component needed: 30, 33 or 36 mm.
- Centre and impact the drilling template.
- Make the pilot holes for the three pegs.
- Set the trial patellar component into place using the patellar clamping forceps.
- Test the articulation in the trochlea.
- Insert the patellar component.

Patellar preparation

Patellar reaming option

- Trim away any peripheral osteophytes.
- Centre the trial inset patella on the central ridge of the articular surface of the native patella. The appropriate size (Ø 23/26/29 mm) is determined based on the following criteria:
 - Superior-to-inferior length of the articular surface
 - Width of the patella's medial articular facet
 - The size must be slightly smaller (by about 2 mm) than the superior-to-inferior length of the articular surface and must be slightly inside the medial edge of the medial articular facet.
- Assemble the clamp corresponding to the chosen patellar implant size onto the locking patellar reaming forceps and lock it into place.
- Position the forceps. The inferior jaw on the reaming forceps must rest against the anterior side of the patella. The clamp must rest against at least one of the patella's two articular facets.
- Use the thumb knob to tighten the reaming forceps.
- Assemble the reamer for inset patella of the same size as the chosen clamp onto the power tool.
- Ream the patella until the stop is reached.
- Use the clamp for trial patella to place the trial cemented patellar implant of the selected size into the native patella.
- Test the articulation of the patella in the trochlea.
- Assemble the patella binding clamp onto the locking patellar reaming forceps and lock it into place.
- Insert the chosen patellar component.







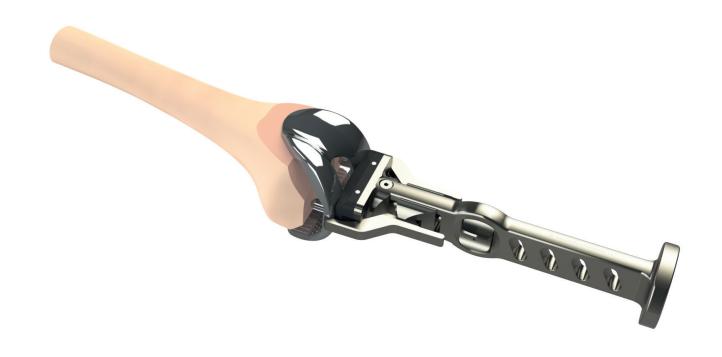
Insertion of chosen tibial baseplate

- Use the keel wrench to screw the distal peg into the tibial baseplate (cemented or cementless).
- Position the tibial baseplate and impact it using the tibial baseplate impactor mounted on the universal handle.

NOTE: If the final insert thickness has not been determined, a trial insert can be placed onto the chosen tibial baseplate for the trials.

Insertion of chosen insert

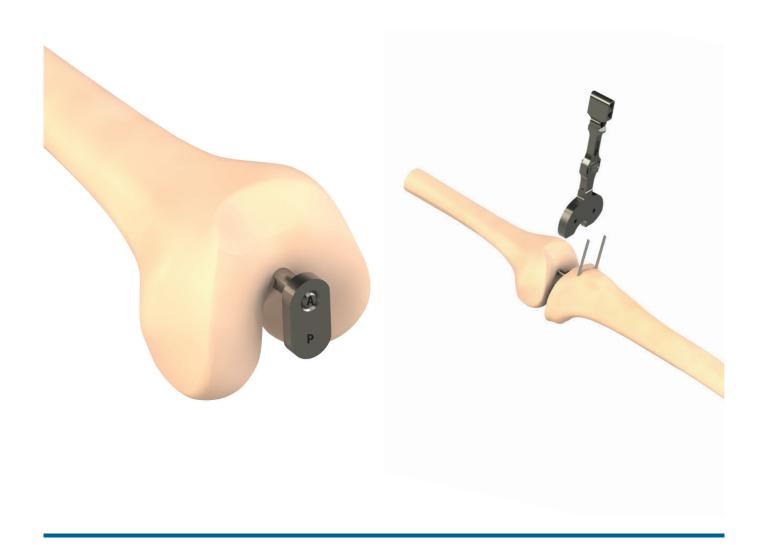
- Hyperflex the knee.
- Slide the insert onto the lateral baseplate rails, and then impact its anterior edge using the tibial impactor.
- Reduce the femoral component onto the insert.

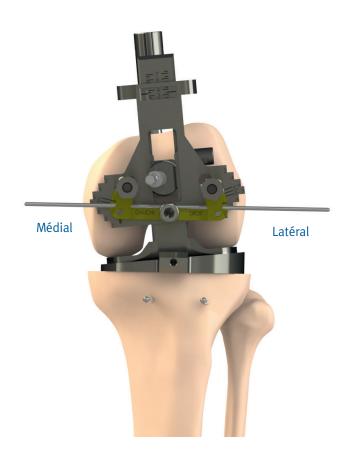




Insertion of chosen femoral component

- Assemble the chosen femoral component (cemented or cementless) with the femoral component holder.
- Place the femoral component onto the femoral cuts; make sure it is aligned precisely, and then impact it. Remove the femoral component holder.
- Finish impacting the component using the femoral component impactor and universal handle.





Optional: Simulated gap balancing before femoral cuts

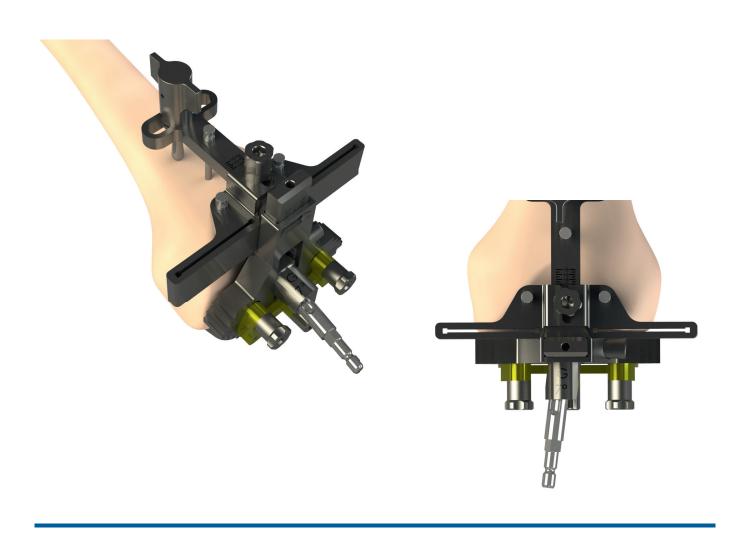
- Locate the entry point of the femoral medullary canal, and drill a hole into it using a step drill bit.
- Use the slap-hammer to insert the short or long intramedullary rod while making sure the anteroposterior (A/P) position is correct.
 Two 10 mm spacers (5° or 7° valgus) are available.
- Before the cuts are made, the following actions can be performed with the knee extended:
 - Simulate gap balancing with 5° or 7° valgus as if the femoral cuts had been made
 - Balance as needed
 - Validate the valgus barrel

IMPORTANT: This gap balancing simulator is optional

Optional: Simulated gap balancing before femoral cuts

- Place the femoral measurement gauge and the valgus barrel validated during the extension phase, on the intramedullary alignment rod.
 Same surgical technique as femoral phase.
- Before the cuts are made, the following can be performed with the knee flexed:
 - Simulate gap balancing with o°, 3° or 6° external rotation by using the appropriate spacer.
- Once the rotation has been determined, fully tighten the front screw with the screwdriver.

IMPORTANT: This gap balancing simulator is optional





Optional: Distal femoral pre-cut

- For patients with a significant pre-operative flexion deformity, a 2 or 4 mm distal femoral pre-cut can be made.
- Secure the pre-cutting guide onto the front part of the measurement gauge and transfer the chosen value.
- Insert two headed nails.
- Once the cut has been made, set the measurement gauge so it touches the distal condyles again.

Optional: MIS Femoral resection guide

- MIS resection guides are available upon request to perform the femoral cuts.
- With the H₅ screwdriver, secure the anterior stabilizer and at least one of the lateral anchors onto the 5-in-1 resection guide of the selected size.
- Place the resection guide on the pins.
- Make sure the guide touches at least one of the distal condyles.
- To secure the construct, put two headed pins into the lateral anchors and one pin (unicortical) into the anterior stabilizer. A smooth pin can be used in the notch instead of the anterior stabilizer.
- Remove the pins and perform the cuts:
 - Anterior
 - Posterior
 - Anterior chamfer
 - Posterior chamfer
 - Distal

NOTE: If desired, remove one pin and perform five half-cuts. Replace this pin and remove the other one to finish the cuts.

Remove the headed pins with the pin extractor, and then remove the resection guide.



Tibial baseplate extraction Revision cases

- To remove the tibial insert, wedge a Lambotte osteotome or bone chisel between the insert and baseplate.
- Assemble the baseplate extractor with the universal handle.
- Screw them into the tibial baseplate.
- Gradually extract the component by tapping under the anvil.

NOTE: The slap-hammer can be assembled with the universal handle to make the extraction easier.

The 5-in-1 ANATOMIC® instrumentation without navigation consists of 6 trays:

- One common
- One for tibial resection
- One for tibial trials
- One for 5-in-1 femoral resections
- One for femoral preparation
- One for femoral trials

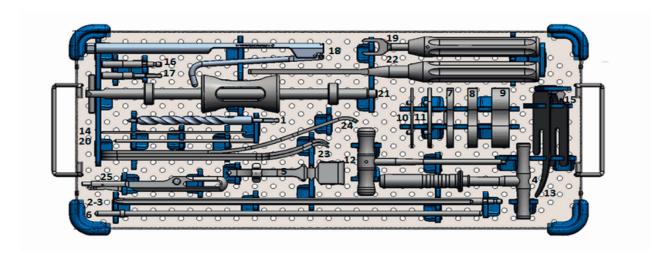
And either of:

- One for patellar resection
- One for patellar reaming

In addition:

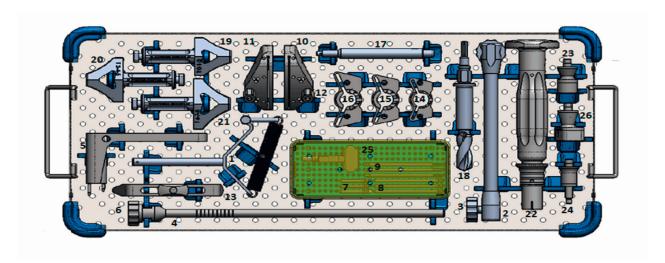
- One optional set for Size o and Size 8 (standard 5-in-1 or MIS 5-in-1)
- One for MIS 5-in-1 femoral resection
- One for gap balancing simulation
- Sterile large saw blades
- Sterile medium saw blades

Common Set



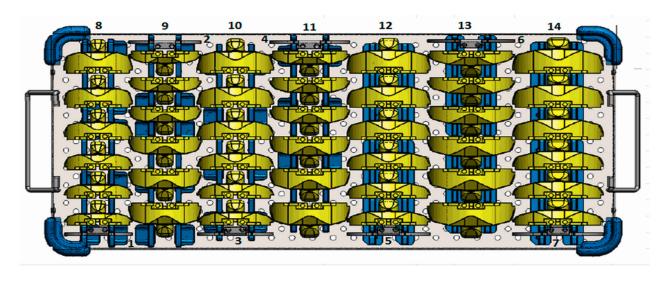
ltem	Name	Product No.	Qty
1	Intramedullary drill bit	2-0200100	1
2	Intramedullary rod - length 250 mm	2-0200200	1
3	Intramedullary rod - length 400 mm	2-0200300	1
4	Universal T-handle	2-0200400	1
5	Universal handle	2-0216400	1
6	Extramedullary alignment rod	2-0200600	2
7	Spacer - height 7 mm	2-0200707	1
8	Spacer - height 10 mm	2-0200710	1
9	Spacer - height 18 mm	2-0200718	1
10	Wedge - height 2 mm for spacer	2-0207002	1
11	Wedge - height 4 mm for spacer	2-0207004	1
12	H ₅ Screwdriver	2-0200800	1
13	Resection gauge	2-0204500	1
14	Blunt K-wire, diam. 2 mm, length 150 mm	2-0103000	2
15	Alignment gauge	2-0206300	1
16	Universal connector for self-drilling K-wire	2-0201100	1
17	AO connector for self-drilling K-wire	2-0201200	1
18	Pin extractor	2-0201500	1
19	Wrench for keel	2-0205500	1
20	Drill bit, Ø3.2, length 145 mm	2-0102400	1
21	Slaphammer	2-0206900	1
22	Flat rasp	2-0206800	1
23	Hohmann retractor 240 mm 18 mm	2-0207100	2
24	Hohmann retractor 265 mm 24 mm	2-0207200	1
25	Tibial baseplate handle	2-0223500	1

Tibial Resection Set



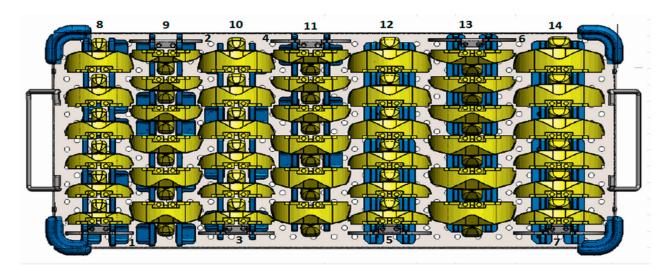
Item	Name	Product No.	Qty
1	Malleolar clamp	2-0201600	1
2	Extramedullary alignment guide	2-0201700	1
3	Thumb knob for extramedullary alignment guide	2-0201800	2
4	Tibial slide bar	2-0201900	1
5	Tibial bracket	2-0202000	1
6	Thumb knob for tibial bracket	2-0202100	1
7	Headed pin - length 30 mm	2-0201301	6
8	Headed pin - length 70 mm	2-0201302	3
9	Headless pin	2-0201400	6
10	Tibial resection guide - Right	2-0202200	1
11	Tibial resection guide - Left	2-0202300	1
12	Thumb knob for resection guide	2-0203800	2
13	Tibial stylus	2-0202400	1
14	Guide for tibial fin punch - Size o/1/2	2-0230801	1
15	Guide for tibial fin punch - Size 3/4/5	2-0230802	1
16	Guide for tibial fin punch - Size 6/7/8	2-0230803	1
17	Removable handle	2-0226500	2
18	Reamer for tibial keel	2-0231600	1
19	Tibial fin punch - Size o/1/2	2-0230901	1
20	Tibial fin punch - Size 3/4/5	2-0230902	1
21	Tibial fin punch - Size 6/7/8	2-0230903	1
22	Universal Handle	2-0232100	1
23	Tibial impactor	2-0231900	1
24	Tibial baseplate extractor	2-0231800	1
25	Jig support for baseplate handle	2-0223600	1
26	Baseplate impactor	2-0233400	1

Tibial Trials Set



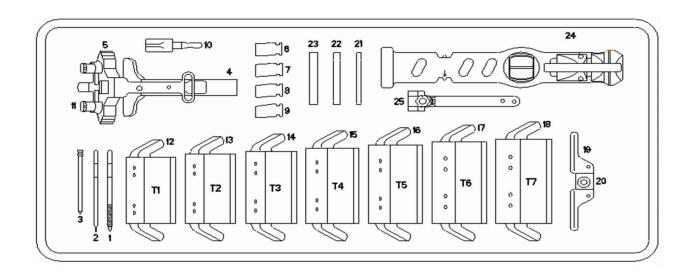
Item	Name	Product No.	Qty
1	Trial tibial baseplate, posterior-stabilised - Size 1	2-0231001	1
2	Trial tibial baseplate, posterior-stabilised - Size 2	2-0231002	1
3	Trial tibial baseplate, posterior-stabilised - Size 3	2-0231003	1
4	Trial tibial baseplate, posterior-stabilised - Size 4	2-0231004	1
5	Trial tibial baseplate, posterior-stabilised - Size 5	2-0231005	1
6	Trial tibial baseplate, posterior-stabilised - Size 6	2-0231006	1
7	Trial tibial baseplate, posterior-stabilised - Size 7	2-0231007	1
8	Trial fixed insert, posterior-stabilised - Size 1, Height 10	2-0230610	1
8	Trial fixed insert, posterior-stabilised - Size 1, Height 12	2-0230611	1
8	Trial fixed insert, posterior-stabilised - Size 1, Height 14	2-0230612	1
8	Trial fixed insert, posterior-stabilised - Size 1, Height 16	2-0230613	1
8	Trial fixed insert, posterior-stabilised - Size 1, Height 18	2-0230614	1
8	Trial fixed insert, posterior-stabilised - Size 1, Height 20	2-0230615	1
9	Trial fixed insert, posterior-stabilised - Size 2, Height 10	2-0230620	1
9	Trial fixed insert, posterior-stabilised - Size 2, Height 12	2-0230621	1
9	Trial fixed insert, posterior-stabilised - Size 2, Height 14	2-0230622	1
9	Trial fixed insert, posterior-stabilised - Size 2, Height 16	2-0230623	1
9	Trial fixed insert, posterior-stabilised - Size 2, Height 18	2-0230624	1
9	Trial fixed insert, posterior-stabilised - Size 2, Height 20	2-0230625	1
10	Trial fixed insert, posterior-stabilised - Size 3, Height 10	2-0230630	1
10	Trial fixed insert, posterior-stabilised - Size 3, Height 12	2-0230631	1
10	Trial fixed insert, posterior-stabilised - Size 3, Height 14	2-0230632	1
10	Trial fixed insert, posterior-stabilised - Size 3, Height 16	2-0230633	1
10	Trial fixed insert, posterior-stabilised - Size 3, Height 18	2-0230634	1
10	Trial fixed insert, posterior-stabilised - Size 3, Height 20	2-0230635	1

Tibial Trials Set



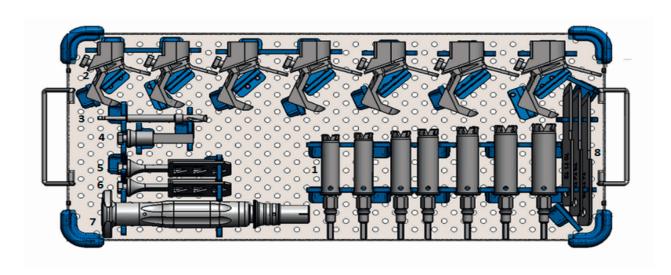
Item	Name	Product No.	Qty
11	Trial fixed insert, posterior-stabilised - Size 4, Height 10	2-0230640	1
11	Trial fixed insert, posterior-stabilised - Size 4, Height 12	2-0230641	1
11	Trial fixed insert, posterior-stabilised - Size 4, Height 14	2-0230642	1
11	Trial fixed insert, posterior-stabilised - Size 4, Height 16	2-0230643	1
11	Trial fixed insert, posterior-stabilised - Size 4, Height 18	2-0230644	1
11	Trial fixed insert, posterior-stabilised - Size 4, Height 20	2-0230645	1
12	Trial fixed insert, posterior-stabilised - Size 5, Height 10	2-0230650	1
12	Trial fixed insert, posterior-stabilised - Size 5, Height 12	2-0230651	1
12	Trial fixed insert, posterior-stabilised - Size 5, Height 14	2-0230652	1
12	Trial fixed insert, posterior-stabilised - Size 5, Height 16	2-0230653	1
12	Trial fixed insert, posterior-stabilised - Size 5, Height 18	2-0230654	1
12	Trial fixed insert, posterior-stabilised - Size 5, Height 20	2-0230655	1
13	Trial fixed insert, posterior-stabilised - Size 6, Height 10	2-0230660	1
13	Trial fixed insert, posterior-stabilised - Size 6, Height 12	2-0230661	1
13	Trial fixed insert, posterior-stabilised - Size 6, Height 14	2-0230662	1
13	Trial fixed insert, posterior-stabilised - Size 6, Height 16	2-0230663	1
13	Trial fixed insert, posterior-stabilised - Size 6, Height 18	2-0230664	1
13	Trial fixed insert, posterior-stabilised - Size 6, Height 20	2-0230665	1
14	Trial fixed insert, posterior-stabilised - Size 7, Height 10	2-0230670	1
14	Trial fixed insert, posterior-stabilised - Size 7, Height 12	2-0230671	1
14	Trial fixed insert, posterior-stabilised - Size 7, Height 14	2-0230672	1
14	Trial fixed insert, posterior-stabilised - Size 7, Height 16	2-0230673	1
14	Trial fixed insert, posterior-stabilised - Size 7, Height 18	2-0230674	1
14	Trial fixed insert, posterior-stabilised - Size 7, Height 20	2-0230675	1

Standard 5-in-1 Femoral Resection Set



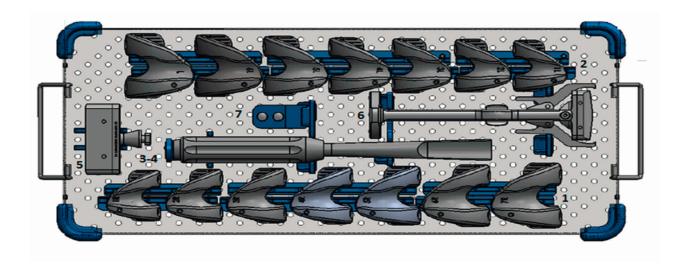
Item	Name	Product No.	Qty
1	Threaded pin - Ø4, length 90 mm	2-0200901	5
2	Smooth pin - Ø4, length 90 mm	2-0201000	2
3	Headed pin, – length 70 mm	2-0201302	4
4	Posterior fork for measurement template	2-0203100	1
5	Measurement template	2-0203200	1
6	Removable guide - 3° femoral valgus	2-0203303	1
7	Removable guide - 5° femoral valgus	2-0203305	1
8	Removable guide - 7° femoral valgus	2-0203307	1
9	Removable guide - 9° femoral valgus	2-0203309	1
10	Femoral stylus	2-0203400	1
11	Drill guide for Ø4 pin	2-0203500	2
12	5-in-1 Femoral resection guide - Size 1	2-0203601	1
13	5-in-1 Femoral resection guide - Size 2	2-0203602	1
14	5-in-1 Femoral resection guide - Size 3	2-0203603	1
15	5-in-1 Femoral resection guide - Size 4	2-0203604	1
16	5-in-1 Femoral resection guide - Size 5	2-0203605	1
17	5-in-1 Femoral resection guide - Size 6	2-0203606	1
18	5-in-1 Femoral resection guide - Size 7	2-0203607	1
19	Additional distal resection guide	2-0203700	1
20	Thumb knob for resection guide	2-0203800	1
21	Femoral recutting block - 4 mm	2-0206004	1
22	Femoral recutting block - 6 mm	2-0206006	1
23	Femoral recutting block - 8 mm	2-0206008	1
24	Femoral component holder	2-0204400	1
25	Femoral resection guide stabilizer	2-0209900	1

Femoral Preparation Set



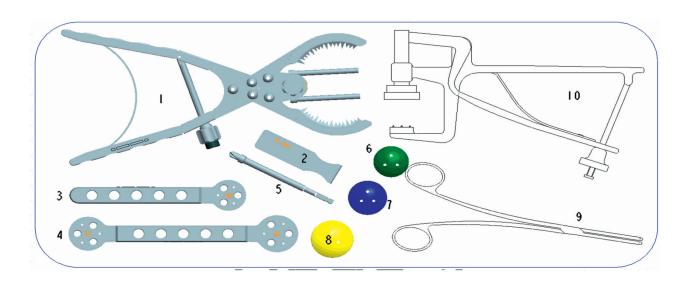
Item	Name	Product No.	Qty
1	Notch reamer - Size 1	2-0231301	1
1	Notch reamer - Size 2	2-0231302	1
1	Notch reamer - Size 3	2-0231303	1
1	Notch reamer - Size 4	2-0231304	1
1	Notch reamer - Size 5	2-0231305	1
1	Notch reamer - Size 6	2-0231306	1
1	Notch reamer - Size 7	2-0231307	1
2	Femoral preparation guide - Size 1	2-0230701	1
2	Femoral preparation guide - Size 2	2-0230702	1
2	Femoral preparation guide - Size 3	2-0230703	1
2	Femoral preparation guide - Size 4	2-0230704	1
2	Femoral preparation guide - Size 5	2-0230705	1
2	Femoral preparation guide - Size 6	2-0230706	1
2	Femoral preparation guide - Size 7	2-0230707	1
3	Drill bit for femoral peg	2-0204000	1
4	L-shaped chisel	2-0231700	1
5	Trochlea box chisel - Right	2-0231400	1
6	Trochlea box chisel - Left	2-0231500	1
7	Universal Handle	2-0232100	1
8	Osteotome - Size o/1/2	2-0233700	1
8	Osteotome - Size 3/4/5	2-0233701	1
8	Osteotome - Size 6/7/8	2-0233702	1

Femoral Trials Set



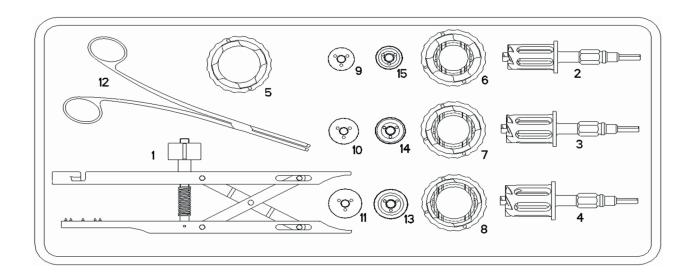
Item	Name	Product No.	Qty
1	Trial femoral component, posterior-stabilised - Size 1 Right	2-0231101	1
1	Trial femoral component, posterior-stabilised - Size 2 Right	2-0231102	1
1	Trial femoral component, posterior-stabilised - Size 3 Right	2-0231103	1
1	Trial femoral component, posterior-stabilised - Size 4 Right	2-0231104	1
1	Trial femoral component, posterior-stabilised - Size 5 Right	2-0231105	1
1	Trial femoral component, posterior-stabilised - Size 6 Right	2-0231106	1
1	Trial femoral component, posterior-stabilised - Size 7 Right	2-0231107	1
2	Trial femoral component, posterior-stabilised - Size 1 Left	2-0231201	1
2	Trial femoral component, posterior-stabilised - Size 2 Left	2-0231202	1
2	Trial femoral component, posterior-stabilised - Size 3 Left	2-0231203	1
2	Trial femoral component, posterior-stabilised - Size 4 Left	2-0231204	1
2	Trial femoral component, posterior-stabilised - Size 5 Left	2-0231205	1
2	Trial femoral component, posterior-stabilised - Size 6 Left	2-0231206	1
2	Trial femoral component, posterior-stabilised - Size 7 Left	2-0231207	1
3	Osteotome	2-0206500	1
4	UNI Osteotome	2-0221500	1
5	Femoral component impactor	2-0233500	1
6	PS Femoral component holder	2-0232000	1
7	Trial peg for trial femoral component, without navigation	2-0233300	2

Patellar Resection Set



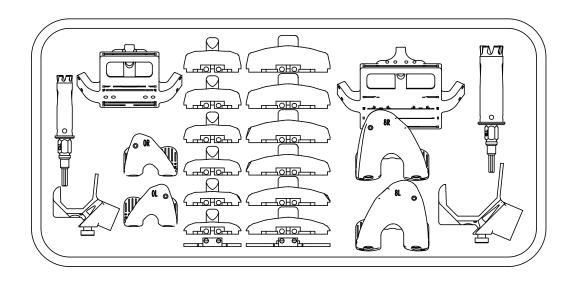
Item	Name	Product No.	Qty
1	Patellar resection forceps	2-0206700	1
2	Patellar resection gauge	2-0208400	1
3	Drilling template Ø 30	2-0204900	1
4	Drilling template Ø 33 and Ø 36	2-0205000	1
5	Drill bit for onset patella	2-0205100	1
6	Trial onset patella Ø30	2-0205330	1
7	Trial onset patella Ø33	2-0205333	1
8	Trial onset patella Ø36	2-0205336	1
9	Clamp for trial patella	2-0104600	1
10	Patellar clamping forceps	2-0206100	1

Patellar Reaming Set



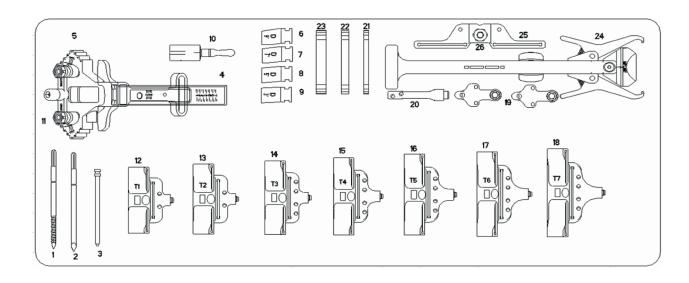
Item	Name	Product No.	Qty
1	Patellar reaming forceps	2-0216600	1
2	Reamer for cementless inset patella Ø23	2-0216523	1
3	Reamer for cementless inset patella Ø26	2-0216526	1
4	Reamer for cementless inset patella Ø29	2-0216529	1
5	Binding clamp for cementless inset patella	2-0216800	1
6	Clamp for patellar reaming forceps Ø23	2-0216723	1
7	Clamp for patellar reaming forceps Ø26	2-0216726	1
8	Clamp for patellar reaming forceps Ø29	2-0216729	1
9	Trial inset patellar implant - cemented Ø 23 mm	2-0205223	1
10	Trial inset patellar implant - cemented Ø 26 mm	2-0205226	1
11	Trial inset patellar implant - cemented Ø 29 mm	2-0205229	1
12	Clamp for trial patella	2-0104600	1
13	Trial inset patellar implant - cementless Ø29	2-0216929	1
14	Trial inset patellar implant - cementless Ø26	2-0216926	1
15	Trial inset patellar implant - cementless Ø23	2-0216923	1

Optional Set - Size o and Size 8



Item	Name	Product No.	Qty
1	Femoral preparation guide - Size o	2-0230700	1
2	Notch reamer - Size o	2-0231300	1
3	5-in-1 Femoral resection guide - Size o	2-0203600	1
4	Trial ANATOMIC femoral component, posterior-stabilised - Size o Left	2-0231200	1
5	Trial ANATOMIC femoral component, posterior-stabilised - Size o Right	2-0231100	1
6	Trial ANATOMIC tibial baseplate, posterior-stabilised - Size o	2-0231000	1
7	Trial ANATOMIC fixed insert, posterior-stabilised - Size o, Height 10 mm	2-0230601	1
8	Trial ANATOMIC fixed insert, posterior-stabilised - Size o, Height 12 mm	2-0230602	1
9	Trial ANATOMIC fixed insert, posterior-stabilised - Size o, Height 14 mm	2-0230603	1
10	Trial ANATOMIC fixed insert, posterior-stabilised - Size o, Height 16 mm	2-0230604	1
11	Trial ANATOMIC fixed insert, posterior-stabilised - Size o, Height 18 mm	2-0230605	1
12	Trial ANATOMIC fixed insert, posterior-stabilised - Size o, Height 20 mm	2-0230606	1
13	Femoral preparation guide - Size 8	2-0230708	1
14	Notch reamer - Size 8	2-0231308	1
15	5-in-1 Femoral resection guide - Size 8	2-0203608	1
16	Trial ANATOMIC femoral component, posterior-stabilised - Size 8 Right	2-0231108	1
17	Trial ANATOMIC femoral component, posterior-stabilised - Size 8 Left	2-0231208	1
18	Trial ANATOMIC tibial baseplate, posterior-stabilised - Size 8	2-0231008	1
19	Trial ANATOMIC fixed insert, posterior-stabilised - Size 8, Height 10 mm	2-0230680	1
20	Trial ANATOMIC fixed insert, posterior-stabilised - Size 8, Height 12 mm	2-0230681	1
21	Trial ANATOMIC fixed insert, posterior-stabilised - Size 8, Height 14 mm	2-0230682	1
22	Trial ANATOMIC fixed insert, posterior-stabilised - Size 8, Height 16 mm	2-0230683	1
23	Trial ANATOMIC fixed insert, posterior-stabilised - Size 8, Height 18 mm	2-0230684	1
24	Trial ANATOMIC fixed insert, posterior-stabilised - Size 8, Height 20 mm	2-0230685	1

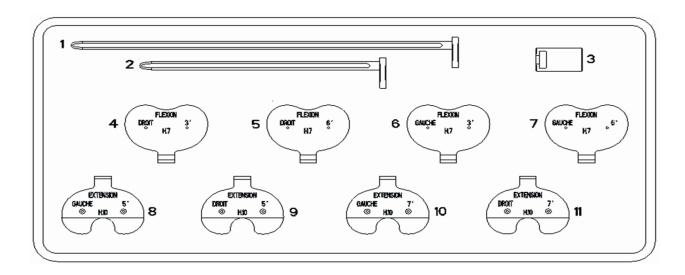
IMA 5-in-1 Femoral Resection Set



Item	Name	Product No.	Qty
1	Threaded pin Ø4 length 90 mm	2-0200901	5
2	Smooth pin Ø4 length 90 mm	2-0201000	2
3	Headed pin - length 70 mm	2-0201302	4
4	Posterior fork for measurement template	2-0203100	1
5	Measurement template	2-0203200	1
6	Removable guide - 3° femoral valgus	2-0203303	1
7	Removable guide - 5° femoral valgus	2-0203305	1
8	Removable guide - 7° femoral valgus	2-0203307	1
9	Removable guide - 9° femoral valgus	2-0203309	1
10	Femoral stylus	2-0203400	1
11	Drill guide for Ø4 pin	2-0203500	2
12	IMA Femoral resection guide - Size 1	2-0217701	1
13	IMA Femoral resection guide - Size 2	2-0217702	1
14	IMA Femoral resection guide - Size 3	2-0217703	1
15	IMA Femoral resection guide - Size 4	2-0217704	1
16	IMA Femoral resection guide - Size 5	2-0217705	1
17	IMA Femoral resection guide - Size 6	2-0217706	1
18	IMA Femoral resection guide - Size 7	2-0217707	1
19	Fastener for IMA femoral resection guide	2-0217900	2
20	Femoral resection guide stabilizer	2-0217800	1
21	Femoral recutting block - 4 mm	2-0206004	1
22	Femoral recutting block - 6 mm	2-0206006	1
23	Femoral recutting block - 8 mm	2-0206008	1
24	Femoral component holder	2-0204400	1
25	Additional distal resection guide	2-0203700	1
26	Thumb knob for resection guide	2-0203800	1



Gap Balancing Simulator Set

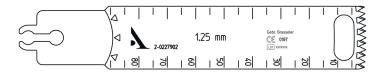


Item	Name	Product No.	Qty
1	Intramedullary rod - gap balancing simulator	2-0208000	1
2	Short intramedullary rod - gap balancing simulator	2-0209400	1
3	Impactor-extractor tip	2-0208100	1
4	Flexion spacer - Right, angle 3°, height 7 mm	2-0208201	1
5	Flexion spacer - Right, angle 6°, height 7 mm	2-0208202	1
6	Flexion spacer - Left, angle 3°, height 7 mm	2-0208203	1
7	Flexion spacer - Left, angle 6°, height 7 mm	2-0208204	1
8	Extension spacer - Left, angle 5°, height 10 mm	2-0208301	1
9	Extension spacer - Right, angle 5°, height 10 mm	2-0208302	1
10	Extension spacer - Left, angle 7°, height 10 mm	2-0208303	1
11	Extension spacer - Right, angle 7°, height 10 mm	2-0208304	1

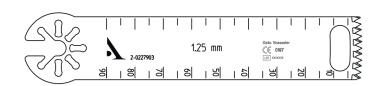
Large saw blades

SYNTHES AO / SODEM large saw blade Sterile Product No. 2-0227901 1.25 mm Get Basseler (\$\frac{1}{2}\cdot \frac{1}{2}\cdot \frac{1}{2}\cdot

STRYKER large saw blade Sterile Product No. 2-0227902

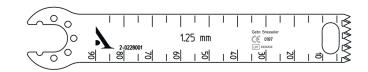


ZIMMER / HALL / LINVATEC large saw blade Sterile Product No. 2-0227903



Medium saw blades

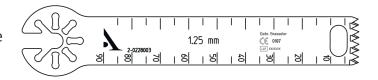
SYNTHES AO / SODEM medium saw blade Sterile Product No. 2-0228001



STRYKER medium saw blade Sterile Product No. 2-0228002



ZIMMER / HALL / LINVATEC medium saw blade Sterile Product No. 2-0228003









Service Clients-France:

Porte du Grand Lyon 01700 Neyron, France Tél.: + 33 (0)4 37 85 19 19 Fax: + 33 (0)4 37 85 19 18

 $\hbox{E-mail: amplitude@amplitude-ortho.com}$

Customer Service Export:

11, cours Jacques Offenbach Zone Mozart 2 26000 Valence, France. Tél. : + 33 (0)4 75 41 87 41 Fax : + 33 (0)4 75 41 87 42

Internet: www.amplitude-ortho.com