





Surgical Technique Pressfit Acetabular System



#InnovationInMotion

The most secure & complete acetabular system for the surgeon and patient!





INDEX of CONTENTS

SYSTEM DESCRIPTION	Página 04
Disclaimer Indications and contraindications	Página 06 Página 06
SURGICAL TECHNIQUE	Página 07

0.	Preoperative planning	Página 08
1.	Surgical approach	Página 08
2.	Acetabular reaming	Página 09
3.	Trial cup and 1st reduction with trial cup.	Página 10
	3.1 Trial cup	Página 10
	3.2 Trial insert	Página 12
4.	QUARTER cup	Página 13
	4.1 Cup impactor	Página 13
	4.2 Alignment rods	Página 14
	4.3 QUARTER cup impaction	Página 17
5.	Screws for extra fixation	Página 18
6.	QUATER cup + trial insert reduction	Página 19
7.	Apical hole occluder introduction	Página 20
8.	Liner introduction	Página 20
7.	Final reduction	Página 22
	Appendix A. Quarter system extraction	Página 23
	A.1 Insert extraction	Página 23
	A.2 Screws and apical hole occluder	Página 23
	A.3 Quarter cup extraction	Página 23

SYSTEM COMPONENTS REFERENCES

2.1 Implants	Página 26
2.1 Instruments	Página 29

Página 25







• Material: Titanium Alloy Ti6Al4V (ISO 5832-3) and Plasma Spray coating (Titanium and Hydroxyapatite).

 \cdot With peripheral grooves that create a perimetral regrowth and increase the primary fixation, ensuring a better pressfit.

- · Apical hole occluder and screw tap, with Plasma Spray coating (Titanium and Hydroxyapatite).
- · Holes for transacetabular screws.
- · 12 internal anti-rotational notches.
- · Internal peripheral groove for liner fixation.

Cups from Ø 40 to Ø 68 mm!

for heads of Ø 22, 28, 32, 36 and 40 mm

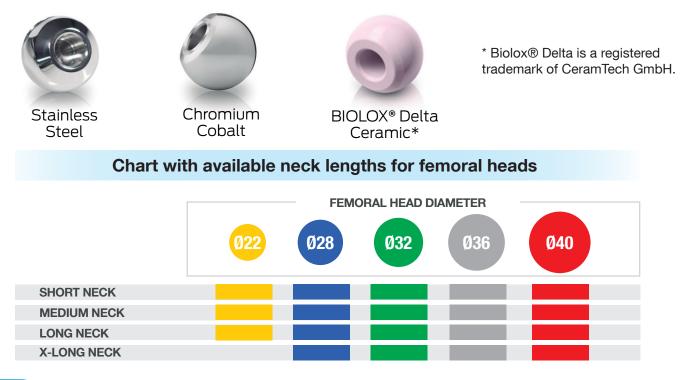
• QUARTER INSERT: Anti-luxation lip 15° Anti-luxation lip 15° • Material: Highly Cross-linked Polyethylene XL UHMWPE (ISO 5834-1) • NEUTRAL and ANTI-LUXATION liner (15° lip) • Designed for femoral heads of Ø 22, 28, 32, 36 and 40 mm.

- · Peripheral groove to fix the insert in the QUARTER cup.
- · 12 anti-rotational notches every 30°.

Minimum thickness 5 mm. in all sizes!

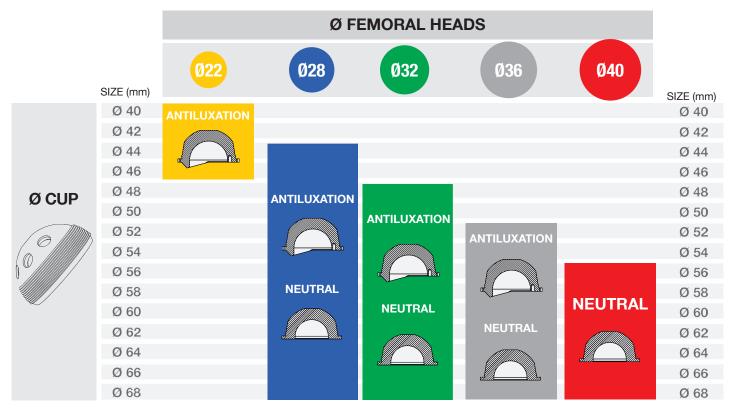
• FEMORAL HEADS:

Ø22, 28, 32, 36 and 40mm.



System compatibility:

QUARTER system allows to implant QUARTER cup from size Ø40 mm to Ø68 mm and femoral heads Ø22 mm to Ø40 mm conditional to the limitation of the insert compatible with the cup. Inserts available are NEUTRAL or ANTILU-XATION, conditional to the limitation of cup size.



A system to restore the patient's natural anatomy with more possibilities than other options on the market.

77 different combinations cup-insert!!

Disclaimer

Surgival Co, S.A.U. (hereinafter referred to as Surgival) is exclusively the manufacturer of this System. Surgival is not acting or making decisions related to surgical practice, as it is not empowered to do so. SURGEONS, as the experts in implant performance during surgical procedures, are responsible for determining and using the appropriate techniques and procedures for implant implantation in each patient's specific case.

Surgival is not responsible for the selected surgical technique, nor for the procedures of evaluation and restitution of the anatomical conditions in each patient.

INDICATIONS

- Osteoarthritis
- Reumatoid arthritis
- Avascular necrosis
- Consequences of subluxation or luxation congenital
- Femoral neck fractures
- Failed reconstruction processes: proximal femoral osteotomy, arthrodesis, painful endoprosthesis

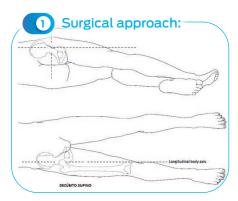


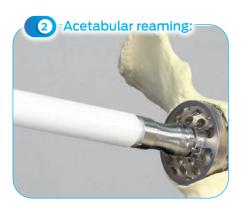
CONTRA-INDICATIONS

- Allergies to the materials described in the Technical Characteristics section (It is advisable to submit the patient to an allergy test before the operation).
- Active infections
- Neuromuscular injury or muscular atrophy
- Vascular deficiency
- Osteoporosis
- Osteomalacia
- Obesity
- Severe pathologies that prevent proper bone formation or increase the risk of mortality (cardiac, pulmonary, metabolic or autoimmune disorders)
- Progressive neurological disease



Surgical Technique · Quarter



















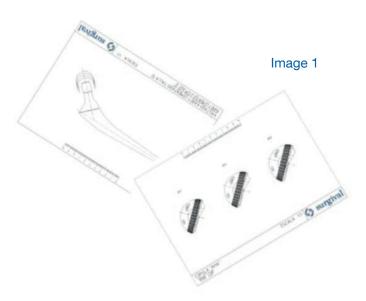




The QUARTER[™] system has a complete range of X-ray templates (Image 1) for the correct pre-operative estimation.

X-ray templates must be positioned with the A/P radiograph to try to determine the pre-operative size and position of the implant. Although final decision should be taken during surgery.

NOTE: Templates* with different magnification are available (100% and 115%). Make sure to use the right template according to the X-ray magnification.

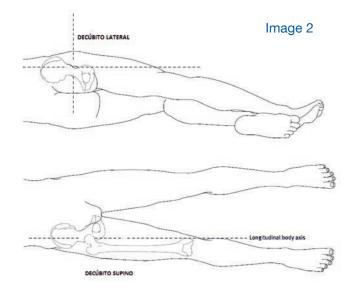


*Contact Surgival to ask for the digital template files.



Surgical approach is at the discretion of the surgeon. This choice will determine the positioning of the patient (Image 2):

- Lateral decubitus position for lateral, posterior and posterolateral approach.
- Supine position for anterior or anterolateral approach.







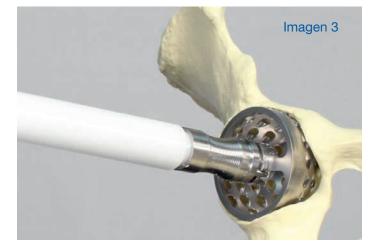
The surgery is started by reaming the acetabulum (Image 3).

Use the Handle for reamer and the Acetabular reamers set.

1. Start with the smaller sizes of reams and progress to bigger sizes, until exposing an hemispheric bleeding cancelloud bone. It is important to preserve subchondral bone for the right fixation of the implant.

Reaming angle is under surgeons criteria (our instruments in posterior stages will offer references of 45° abduction and 15° anteversion).

▲ NOTE: The set includes a Ø38 mm starter reamer which does not correspond to any implant size (the smallest QUARTER cup size is Ø40 mm). The function of this drill is only to initiate drilling.



GEOMETRICAL CORRESPONDENCE REAMER SIZE Ø 52 - TRIAL CUP SIZE Ø 52 - QUARTER CUP SIZE Ø 52



REAMER SIZE Ø 52 mm Ø 52 mm



TRIAL CUP SIZE Ø 52 mm Ø 53 mm. (1 mm pressfit)



QUARTER CUP SIZE Ø 52 mm Ø 53,3 mm. (1,3 mm pressfit)

The diameter of the TRIAL CUP is + 1 mm compared to the REAMER of the same size. This will allow to secure the press-fit when performing the trial reduction with the trial components.

The diameter of the QUARTER CUP in the area of the radial grooves is + 1.3 mm compared to the REAMER. This will give an extra press-fit fixation of the cup.



3 Trial cup and 1st reduction with trial cup

3.1 Trial cup

Make sure the acetabulum is clean and without any soft tissues that could interfere when positioning the trial cup.

Place the trial cup of the same size than the last reamer used (Image 4). Asses the perfect fitting of the trial cup. The windows of the trial cup allow to confirm the full seating.

Position of the QUARTER TRIAL CUP is under surgeon's criteria but our instruments have references to facilitate 45° abduction and 15° anteversion (Image 5).

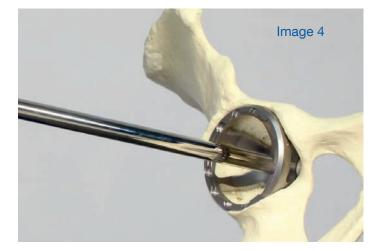
Use the cup and insert universal handle to position the trial cup with the desired orientation.

ORIENTATION OF THE TRIAL CUP

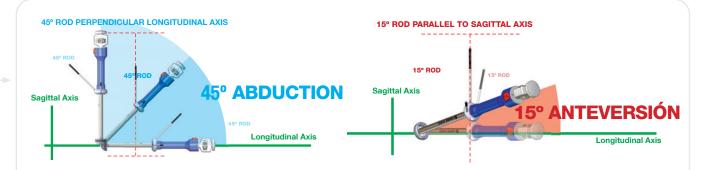
How to use the alignment rods to reference the position in 45° abduction and 15° anteversion.

1. Screw the first rod in the marked 45° thread fixing the position of the rotating ring (fully threaded rod blocks the position of the ring)

2. Screw the second rod in one of the 15° threaded holes available. (Right of the 45° hole for a right hip operation or left of the 45° hole for a left hip)







Position of the final implant is under surgeon's criteria but our instrument have references to facilitate 45° abduction and 15° anteversion. QUARTER cup and insert universal handle and QUARTER cup definitive impactor both have the alignment rods.



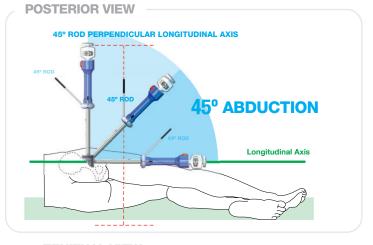


LATERAL PATIENT POSITION

Approaches: lateral, posterolateral and posterior.

45° ABDUCTION

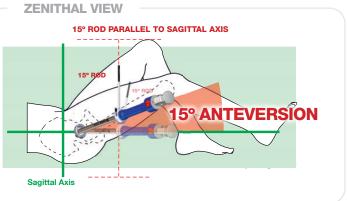
1. Move the handle laterally until reaching 45° with the longitudinal body axis. The 45° ROD will be perpendicular to the longitudinal body axis.



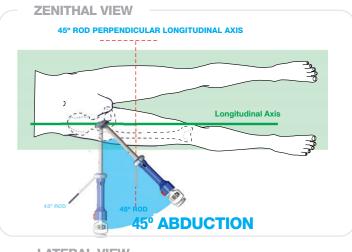
15° ANTERVERSION

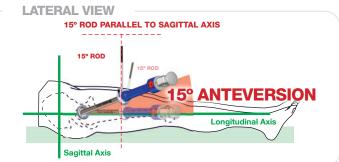
2. Move the handle from posterior to anterior until reaching 15° with the longitudinal axis. The 15° ROD will be parallel to the sagittal axis.

° ANTEVERSION



SUPINE PATIENT POSITION





Approaches: anterior or anterolateral.

45° ABDUCTION

45° ABDUCTION

1. Move the handle laterally until reaching 45° with the longitudinal body axis. The 45° ROD will be perpendicular to the longitudinal body axis.

15° ANTERVERSION

2. Move the handle from posterior to anterior until reaching 15° with the longitudinal axis. The 15° ROD will be parallel to the sagittal axis.



3.2 Trial insert

Choose your desired trial insert from all our range conditional to three variable:

• Trial Cup size

Desired femoral head diameter

• Neutral or Antiluxation Insert

Trial Insert and trial femoral heads must be of the same colour for their correspondence.

	9	9		9	
	022	Ø28	Ø32	Ø36	Ø40
COLOUR	YELLOW	BLUE	GREEN	GREY	RED
CUPS	Ø40-Ø46	Ø44-Ø68	Ø48-Ø68	Ø52-Ø68	Ø56-Ø68
HEAD	Ø22	Ø28	Ø32	Ø36	Ø40
NECKS	S-M-L	S-M-L-XL	S-M-L-XL	S-M-L-XL	S-M-L-XL
INSERT	ANTI-LUXATION	ANTI-LUXATION OR NEUTRAL	ANTI-LUXATION OR NEUTRAL	ANTI-LUXATION OR NEUTRAL	ANTI-LUXATION OR NEUTRAL

1. Position the trial insert manually and tighten the apical screw with the hexagonal straight screwdriver (image 6).

▲ NOTE: The apical screw ensures the position of the trial insert without tightening it too strongly.

CAUTION: Trial insert must not be impacted.

2. The system has trial femoral heads for rasps and trial femoral heads for stems. Choose the femoral trial head of the same colour than the trial insert and with the desired neck length available in the system (short, medium, long or extra long) (image 7).

3. Perform the trial reduction and assess tensions, the full range of movements and stability of the hip.

EXTRACTION OF THE TRIAL CUP

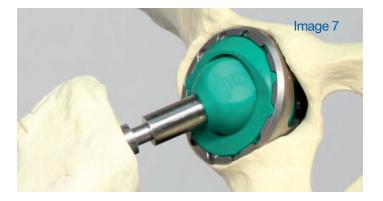
Untighten the apical screw with the hexagonal straight screwdriver.

NOTE: if the apical screw is totally unscrewed from the trial insert could fall into the surgical field)

Trial insert can be manually removed from the trial cup or with a Kocher clip.

Screw the trial cup and insert universal handle to the trial cup in the apical hole to extract the trial cup.









4.1 Cup impactor

The tip of the QUARTER definitive cup impactor has two anti-rotational tabs (image 8) that must be introduced in the two slots (image 9) of the QUAR-TER CUP when tightening the hand knob of the handle. The position of the tabs are marked with two arrows in the tip of the impactor (image 10 and 11).

The locking button of the system secures the cup to the handle during impaction.









To secure the cup during impaction, the design of our impactor has a system that approaches the cup to the impactor when tightening the hand knob.

1. Screw the QUARTER definitive cup impactor slightly to the QUARTER cup and find the position where the tabs of the impactor (marked with the arrow) face the slots in the cup.

2. Keeping the position to match up the tabs with the slots, tighten the hand knob of the handle to fix the cup to the impactor.

3. Make sure the tabs are fully inserted in the slots before impaction (image 11).

4. Unscrew slightly the hand knob and push the locking button of the system and screw again until click it locked.

5. Without releasing the button impact the QUARTER cup.





4.2 Alignment rods

Position of the final implant is under surgeon's criteria but our intruments have references of 45° abduction and 15° anteversion to facilitate that habitual position. Correct aligment of the cup also positions the screw holes in the posterior-superior area of the acetabulum for extra fixation.

When the QUARTER definitive cup impactor is fully and correctly assembled to the cup, one of the arrows points the center hole of the cup. This center hole and the arrow are the ones to be aligned with the 45° aligment rod. This reference allows to position the screw holes posterior-superior in the acetabulum (Image 12).

To prepare the impactor with the alignment rods available for orientation (45° abduction and 15° anteversion) follow these steps:

1. Screw the first rod in the marked 45° thread without fixing the position of the rotating ring (fully threaded rod blocks the position of the ring).

2. Rotate the ring and align the rod positioned in the 45° thread with the arrow marking the centered hole of the cup.

3. Screw the 45° rod fully to block the position of the ring.

4. Screw the second rod in one of the marked 15° threaded holes available. (Right of the 45° hole for a right hip operation or left of the 45° hole for a left hip).

▲ NOTE: Make sure the patient is rightly positioned in the table, otherwise the provided references within the sagital plane and the frontal plane may lead to the incorrect position of the cup.







SURGICAL TECHNIQUE

15° ANTEVERSION

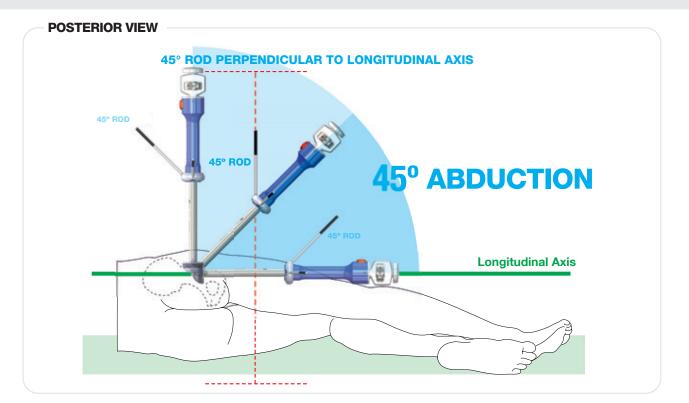
5° ABDUCTION

PATIENT IN LATERAL POSITION

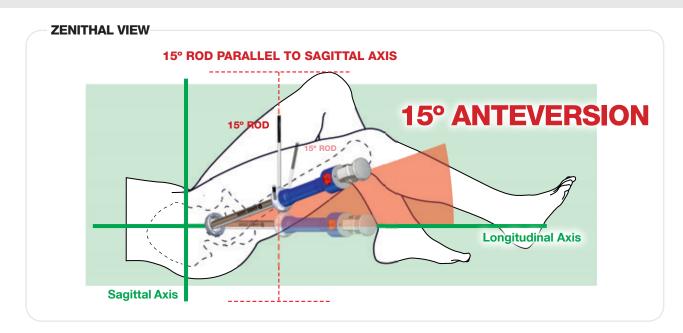
Approaches: lateral, posterolateral and posterior

Position of the final implant is under surgeon's criteria but our intruments have references to facilitate 45° abduction and 15° anteversion..

1. Move the handle laterally until reaching 45° with the longitudinal body axis. The 45° ROD will be perpendicular to the longitudinal body axis.



2. Move the handle from posterior to anterior until reaching 15° with the longitudinal axis. The 15° ROD will be parallel to the sagittal axis.

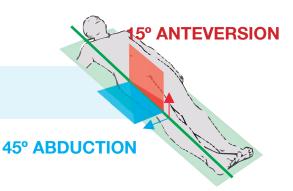


PATIENT IN SUPINE POSITION Approaches: anterior or anterolateral

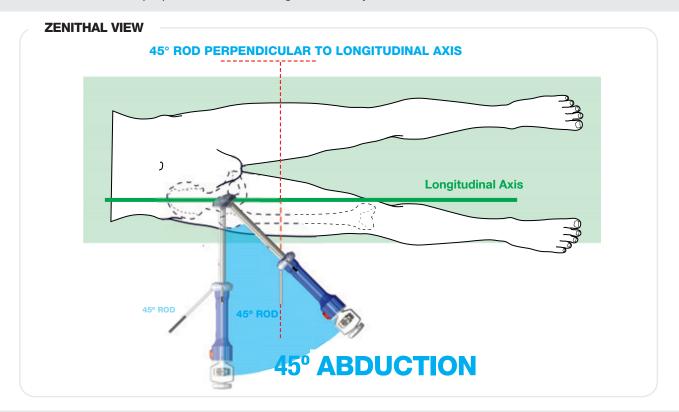
Position of the final implant is under surgeon's

criteria but our intruments have references to facilitate 45° abduction and 15° anteversion.

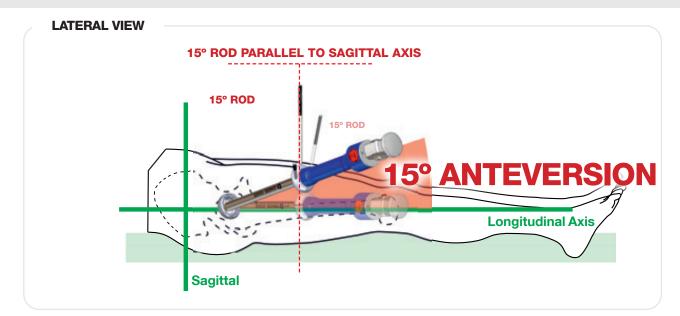




1. Move the handle laterally until reaching 45° with the longitudinal body axis. The 45° ROD will be perpendicular to the longitudinal body axis.



2. Move the handle from posterior to anterior until reaching 15° with the longitudinal axis. The 15° ROD will be parallel to the sagittal axis.





SURGICAL TECHNIQUE

4.3 QUARTER cup impaction

The cup holes must be positioned posterior-superior in the acetabulum (image 13) in order to:

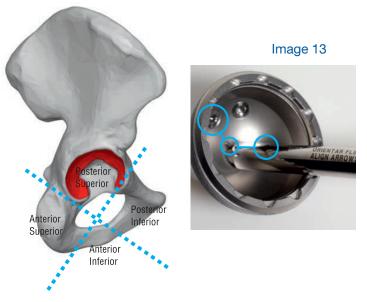
- Avoid vascular and nerve damage in all the anterior part of the acetabulum.
- Posterior-superior acetabulum allows screws longer than 35 mm in the llium.

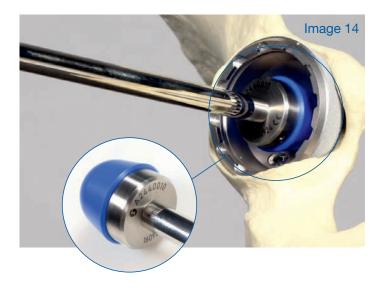
1. IMPACT the cup and unscrew the impactor from the cup unscrewing the hand knob of the impactor handle.

Apical hole allows visual assessment of the correct impaction.

2. For extra impaction, use the QUARTER definitive cup impactor with the universal hand-le. (Image 14)

3. After impactation tighten the hole occluders or retire them if screws are used for extra fixation.





SURGICAL TECHNIQUE



5 Extra fixation with SCREWS (optional):

When the press-fit design of the QUARTER cup is not giving the desired fixation or movement is appreciated after impaction, it is necessary to use the provided screws in the posterior-superior area of the acetabulum.

1. Retire the desired hole occluders using the Straight hexagonal screwdriver or the Cardan hexagonal screwdriver (Images 15 y 16).

▲ NOTE: Hole occluders may fall from the tip of the screwdrivers. Be careful and use your hand to hold them and avoid them falling in the surgical field.

2. Use the drill flexible shaft and one of the two Ø 3,2 mm drill bits available: 35 or 56 mm.

Position the Drill guide in the hole and point it in the desired direction. Introduce the drill bit through the guide to drill (image 17).

Drill the whole length of the drill bit or until the cortical bone is reached.

3. Use the Depth gauge to determine the length of the screw required (Image 18).

4. Hold the screws with the Screw holding forceps, point it in the right direction of the drilled hole and screw them with the straight or cardan hexagonal screwdriver (Image 19).

▲ NOTE: Check manually that none of the screw heads protude over the hole and may damage the insert or avoid correct positioning.



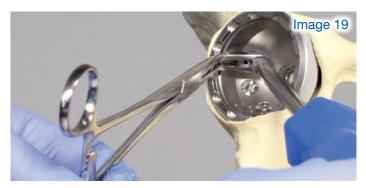
Straight hexagonal screwdriver (ref. B3610005)



Cardan hexagonal screwdriver (ref. B3611360)









6 QUARTER cup + trial insert reduction

Use the trial insert for the implanted QUARTER cup size combined with the correspondent trial femoral head available in five diameters (Ø22, Ø28, Ø32, Ø36 and Ø40) and several neck lenghts. Trial insert and femoral head must be of the same colour.



1. Make sure the interior of the cup is cleaned and dried and intrroduce manually the trial insert in the cup

2. Use the straight hexagonal screwdriver (Image 20) to fix the trial insert to the QUARTER CUP

A NOTE: Do not impact the trial insert.

▲ Apical screw of the trial insert is only intended to fix the position during the trial reduction. Do not overtighten it as trial insert may be damaged.

3. Choose the correspondent trial femoral head for the final trial reduction. The trial femoral head must be of the same colour than the insert and is available in four neck lengths (S, M, L and XL)

4. Once reduced, assess tensions, aligment, mobility and flexion and external rotation). (Image 21)

5. After trial reduction and assessment, unscrew the apical screw and retire manually or with a Kocher forceps the trial insert.

▲ NOTE: Do not unscrew totally the apical screw, as may fall in the surgical field.

Be careful using the Kocher forceps to retire the trial insert as may scratch it.



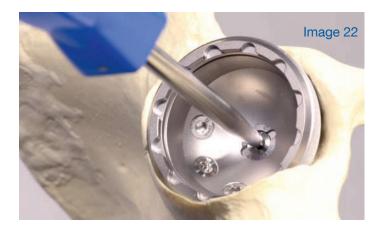




7 Apical hole occluder introduction:

Take the apical hole occluder and use the straight hexagonal screwdriver to tighten it in the apical hole (Image 22).

A NOTE: Apical hole occluder may fall from the tip of the screwdriver. Be careful and use your hand to hold it and avoid it falling in the surgical field.

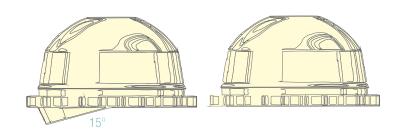




Insert introduction:

Choose the correct insert having into account:

- Diameter of the QUARTER cup implanted (Ø40 to Ø68)
- Diameter of the femoral head to be implanted (Ø22, Ø28, Ø32, Ø36 and Ø40) Conditional to the limitation of the Quarter cup size for each insert
- Neutral or anti-luxation insert (one or both options available depending on insert size)





Choose the positioner corresponding to the definitive insert and screw the universal handle (image 23).

1. The positioner has 3 pins to be introduced in the 3 holes that the insert has (image 23). These pins hold the insert to the positioner and allows to position and impact the insert.

▲ NOTE: The cup must be cleaned and dried before sitting the insert.

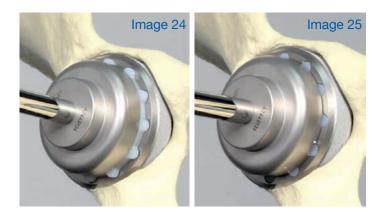




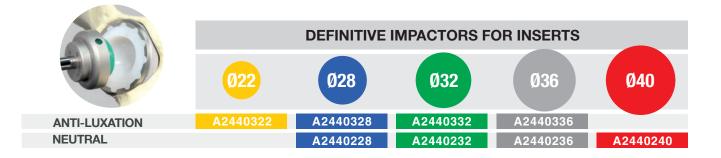
2. Position the insert in the cup with the handle (image 24) checking before definitive impaction:

- Insert is correctly settled with all the peripheral grooves inserted in the peripheral notches of the cup.
- When using ANTI-LUXATION INSERT, the anti-luxation tab must be positioned posterior-superior.

3. Impact with the hammer and check visually that the peripheral grooves are leveled with the peripheral notches of the cup (image 25). Now the handle and the positioner can be retired.

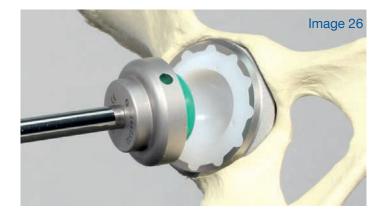


If extra impaction may be needed for the system, there are available definitive impactors for each size. These impactors adapt to the sferic shape of the system and do not contact with the internal part of the insert to avoid damage on the articular surface.



4. Choose the definitive impactor corresponding to the liner implanted (depending on femoral size and neutral or anti-luxant liner) and screw it to the cup and insert universal handle. The impactor adapts to the spherical cap and avoids contact with the liner.

Impact with the hammer (Image 26)



SURGICAL TECHNIQUE





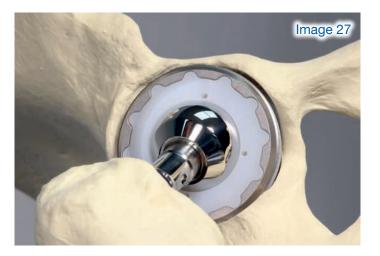
Final reduction:

1. Impact the femoral head with the assessed neck length in the trial reduction.

▲ NOTE: Do not use the hammer directly on the head to impact it to the stem. Use always the femoral head reductor impactor provided.

▲ NOTE: The taper neck of the stem must be cleaned and dried before impacting the head. The cup of the insert must be cleaned to avoid any debris before final reduction.

2. Reduce the hip and assess the stability, range of motion, tension of the system and risk of luxation.







Extraction Technique · Quarter



In the event of implant failure, the system may be retired following these steps:

A.1 Insert extraction

▲ NOTE: Insert extraction may damage the interior of the QUARTER cup. It is recommended to extract the insert only in the cases where all the system will be retired.

1. Drill the insert with the \emptyset 3,2 mm drill bit in the crown of the insert with an inclination of 20° until reaching the cup (image 29).

▲ NOTE: Drilling will produce debris that we must clean from the surgycal plane.

2. Screw the insert extractor in the drilled hole until the insert is lifted and released from its original position (image 30 and 31).

▲ NOTE: The insert extractor may damage the interior of the cup. Extraction is only recommended in the event of retiring the whole system.

The retired insert cannot be used again as the performed extraction will damage it completely.

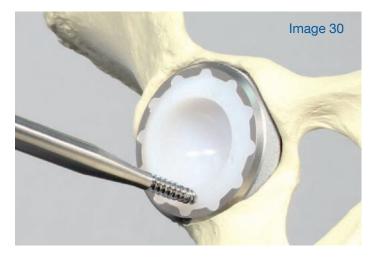
A.2 Screws and apical hole occluder

1. Retire the screws and appical hole occluder with the straight hexagonal screwdriver or/and the cardan hexagonal screwdriver.

A.3 QUARTER cup extraction

1. Screw the quarter definitive cup impactor in the apical hole as previously explained in the surgical technique. Remove the QUARTER CUP.









System References · Quarter





• QUARTER™ CUP:



Diameter (Ø)	Reference
Ø 40 mm	A2401640E
Ø 42 mm	A2401642E
Ø 44 mm	A2401644E
Ø 46 mm	A2401646E
Ø 48 mm	A2401648E
Ø 50 mm	A2401650E
Ø 52 mm	A2401652E
Ø 54 mm	A2401654E
Ø 56 mm	A2401656E
Ø 58 mm	A2401658E
Ø 60 mm	A2401660E
Ø 62 mm	A2401662E
Ø 64 mm	A2401664E
Ø 66 mm	A2401666E
Ø 68 mm	A2401668E





• QUARTERTM SCREWS:

Lenght	Reference
20 mm	A2400520
25 mm	A2400525
30 mm	A2400530
35 mm	A2400535
40 mm	A2400540
45 mm	A2400545

			a	*	書
	2	幸	差	圭	丰
產	蒹	書	Ŧ	-	Ŧ
王	3	Ŧ	Ŧ	王	3



• QUARTERTM INSERTS:

ANTI-LUXATION (15°)

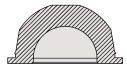


Ø Cup	Ø Femoral Head	Reference
Ø 40 mm	Ø 22 mm	A2412240E
Ø 42 mm	Ø 22 mm	A2412242E
Ø 44 mm	Ø 22 mm	A2412244E
Ø 46 mm	Ø 22 mm	A2412246E
~	~	
Ø 44 mm	Ø 28 mm	A2412844E
Ø 46 mm	Ø 28 mm	A2412846E
Ø 48 mm	Ø 28 mm	A2412848E
Ø 50 mm	Ø 28 mm	A2412850E
Ø 52 mm	Ø 28 mm	A2412852E
Ø 54 mm	Ø 28 mm	A2412854E
Ø 56 mm	Ø 28 mm	A2412856E
Ø 58 mm	Ø 28 mm	A2412858E
Ø 60 mm	Ø 28 mm	A2412860E
Ø 62 mm	Ø 28 mm	A2412862E
Ø 64 mm	Ø 28 mm	A2412864E
Ø 66 mm	Ø 28 mm	A2412866E
Ø 68 mm	Ø 28 mm	A2412868E
Ø 48 mm	Ø 32 mm	A2413248E
Ø 50 mm	Ø 32 mm	A2413250E
Ø 52 mm	Ø 32 mm	A2413252E
Ø 52 mm	Ø 32 mm	A2413254E
Ø 56 mm	Ø 32 mm	A2413256E
Ø 58 mm	Ø 32 mm	A2413258E
Ø 60 mm	Ø 32 mm	A2413260E
Ø 62 mm	Ø 32 mm	A2413262E
Ø 64 mm	Ø 32 mm	A2413264E
Ø 66 mm	Ø 32 mm	A2413266E
Ø 68 mm	Ø 32 mm	A2413268E
Ø 52 mm	Ø 36 mm	A2413652E
Ø 54 mm	Ø 36 mm	A2413654E
Ø 56 mm	Ø 36 mm	A2413656E
Ø 58 mm	Ø 36 mm	A2413658E
Ø 60 mm	Ø 36 mm	A2413660E
Ø 62 mm	Ø 36 mm	A2413662E
Ø 64 mm	Ø 36 mm	A2413664E
Ø 66 mm	Ø 36 mm	A2413666E
Ø 68 mm	Ø 36 mm	A2413668E



• QUARTERTM INSERTS:

NEUTRAL



Ø Cup	Ø Femoral head	Reference
Ø 44 mm	Ø 28 mm	A2402844E
Ø 46 mm	Ø 28 mm	A2402846E
Ø 48 mm	Ø 28 mm	A2402848E
Ø 50 mm	Ø 28 mm	A2402850E
Ø 52 mm	Ø 28 mm	A2402852E
Ø 54 mm	Ø 28 mm	A2402854E
Ø 56 mm	Ø 28 mm	A2402856E
Ø 58 mm	Ø 28 mm	A2402858E
Ø 60 mm	Ø 28 mm	A2402860E
Ø 62 mm	Ø 28 mm	A2402862E
Ø 64 mm	Ø 28 mm	A2402864E
Ø 66 mm	Ø 28 mm	A2402866E
Ø 68 mm	Ø 28 mm	A2402868E
~	~ ~~	
Ø 48 mm	Ø 32 mm	A2403248E
Ø 50 mm	Ø 32 mm	A2403250E
Ø 52 mm	Ø 32 mm	A2403252E
Ø 54 mm	Ø 32 mm	A2403254E
Ø 56 mm	Ø 32 mm	A2403256E
Ø 58 mm	Ø 32 mm	A2403258E
Ø 60 mm	Ø 32 mm	A2403260E
Ø 62 mm	Ø 32 mm	A2403262E
Ø 64 mm	Ø 32 mm	A2403264E
Ø 66 mm	Ø 32 mm	A2403266E
Ø 68 mm	Ø 32 mm	A2403268E

Ø Cup	Ø Femoral head	Reference
Ø 52 mm	Ø 36 mm	A2403652E
Ø 54 mm	Ø 36 mm	A2403654E
Ø 56 mm	Ø 36 mm	A2403656E
Ø 58 mm	Ø 36 mm	A2403658E
Ø 60 mm	Ø 36 mm	A2403660E
Ø 62 mm	Ø 36 mm	A2403662E
Ø 64 mm	Ø 36 mm	A2403664E
Ø 66 mm	Ø 36 mm	A2403666E
Ø 68 mm	Ø 36 mm	A2403668E
2 - -		
Ø 56 mm	Ø 40 mm	A2404056E
Ø 58 mm	Ø 40 mm	A2404058E
Ø 60 mm	Ø 40 mm	A2404060E
Ø 62 mm	Ø 40 mm	A2404062E
Ø 64 mm	Ø 40 mm	A2404064E
Ø 66 mm	Ø 40 mm	A2404066E
Ø 68 mm	Ø 40 mm	A2404068E



• FEMORAL HEADS:

BIOLOX® delta CERAMIC*

*BIOLOX® delta is a trade mark from CeramTec GmbH



Diameter Ø	Neck	Reference
Ø 22 mm	Short	A1507160E
Ø 22 mm	Medium	A1507161E
Ø 22 mm	Large	A1507162E
Ø 28 mm	Short	A1507140E
Ø 28 mm	Medium	A1507141E
Ø 28 mm	Large	A1507142E
Ø 32 mm	Short	A1507113E
Ø 32 mm	Medium	A1507114E
Ø 32 mm	Large	A1507115E
Ø 32 mm	Extra Large	A1507116E
Ø 36 mm	Short	A1507170E
Ø 36 mm	Medium	A1507171E
Ø 36 mm	Large	A1507172E
Ø 36 mm	Extra Large	A1507173E
Ø 40 mm	Short	A1507180E
Ø 40 mm	Medium	A1507181E
Ø 40 mm	Large	A1507182E
Ø 40 mm	Extra Large	A1507183E



• FEMORAL HEADS:



COBALT CHROMIUM

Diameter Ø	Neck	Reference
Ø 22 mm	Short	A1506160E
Ø 22 mm	Medium	A1506161E
Ø 22 mm	Large	A1506162E
Ø 28 mm	Short	A1506040E
Ø 28 mm	Medium	A1506041E
Ø 28 mm	Large	A1506042E
Ø 28 mm	Extra Large	A1506043E
Ø 32 mm	Short	A1506013E
Ø 32 mm	Medium	A1506014E
Ø 32 mm	Large	A1506015E
Ø 32 mm	Extra Large	A1506016E
Ø 36 mm	Short	A1506070E
Ø 36 mm	Medium	A1506071E
Ø 36 mm	Large	A1506072E
Ø 36 mm	Extra Large	A1506073E
Ø 40 mm	Short	A1506080E
Ø 40 mm	Medium	A1506081E
Ø 40 mm	Large	A1506082E
Ø 40 mm	Extra Large	A1506083E

STAINLESS STEEL



Diameter Ø	Neck	Reference
Ø 22 mm	Short	A1509160E
Ø 22 mm	Medium	A1509161E
Ø 22 mm	Large	A1509162E
Ø 28 mm	Short	A1509040E
Ø 28 mm	Medium	A1509040E
Ø 28 mm	Large	A1509042E
Ø 28 mm	Extra Large	A1509043E
Ø 32 mm	Short	A1509013E
Ø 32 mm	Medium	A1509014E
Ø 32 mm	Large	A1509015E
Ø 32 mm	Extra Large	A1509016E
Ø 36 mm	Short	A1509070E
Ø 36 mm	Medium	A1509071E
Ø 36 mm	Large	A1509072E
Ø 36 mm	Extra Large	A1509073E
<i>~</i> 10		
Ø 40 mm	Short	A1509080E
Ø 40 mm	Medium	A1509081E
Ø 40 mm	Large	A1509082E
Ø 40 mm	Extra Large	A1509083E



Instrumental SETS

The instrumentation of the QUARTER system is designed with a concept of customization and versatility that allows the configuration of some of the boxes to be adapted according to the most commonly used implant variants. This makes it possible to reduce the number of boxes considerably and, consequently, the investment required.

By default, there are 3 preconfigured SETS.











SYSTEM REFERENCES





A24451XX

BOX QUARTER INST ...

UPPER TRAY

		SET 1	SET 2	SET 3
B3610005	Straight hexagonal screwdriver	~	~	~
B3611360	Cardan hexagonal screwdriver	~	~	~
F0005950	Screw holding forceps	~	~	~
F0005960	Depth gauge	~	~	~
F0005935	Drill bit guide (Ø 3,2 mm)	~	~	~
F0005930	Flexible shaft (x2)	~	~	~
F0005931	Drill (Ø 3,2 x 25 mm)	~	~	~
F0005932	Drill (Ø 3,2 x 45 mm)	~	~	~
A2421040	Trial Cup Ø 40 mm	~	~	~
A2421042	Trial Cup Ø 42 mm	~	~	~
A2421044	Trial Cup Ø 44 mm	~	~	~
A2421046	Trial Cup Ø 46 mm	~	~	~
A2421048	Trial Cup Ø 48 mm	~	~	~
A2421050	Trial Cup Ø 50 mm	~	~	~
A2421052	Trial Cup Ø 52 mm	~	~	~
A2421054	Trial Cup Ø 54 mm	~	~	~
A2421056	Trial Cup Ø 56 mm	~	~	~
A2421058	Trial Cup Ø 58 mm	~	~	~
A2421060	Trial Cup Ø 60 mm	~	~	~
A2421062	Trial Cup Ø 62 mm	~	~	~
A2421064	Trial Cup Ø 64 mm	~	~	~
A2421066	Trial Cup Ø 66 mm	~	~	~
A2421068	Trial Cup Ø 68 mm	~	~	~



LOWE	ER TRAY	SET 1	SET 2	SET 3
A2440005	Guide impactor for QUARTER cup	~	~	~
A2440010	Final impactor template for cup	~	~	~
A2440015	Handle for trial cup and template	~	~	~
A2440020	Insert extractor	~	~	~
A2700380	Large reductor impactor for head	~	~	~
A2440028	Positioner for neutral insert (head Ø 28 mm)			
A2440032	Positioner for neutral insert (head $Ø$ 32 mm)			
A2440036	Positioner for neutral insert (head $Ø$ 36 mm)			~
A2440040	Positioner for neutral insert (head Ø 40 mm)*			
A2440122	Positioner for anti-luxation insert (head \emptyset 22 mm)	~	~	~
A2440128	Positioner for anti-luxation insert (head $Ø$ 28 mm)	~	~	~
A2440132	Positioner for anti-luxation insert (head Ø 32 mm)	~	~	~
A2440136	Positioner for anti-luxation insert (head Ø 36 mm)		~	~
A2440228	Definitive impactor neutral insert (head Ø 28 mm)			
A2440232	Definitive impactor neutral insert (head Ø 32 mm)			
A2440236	Definitive impactor neutral insert (head Ø 36 mm)			~
A2440240	Definitive impactor neutral insert (head Ø 40 mm)*			
A2440322	Definitive impactor anti-luxation insert (head Ø 22 mm)	~	~	~
A2440328	Definitive impactor anti-luxation insert (head Ø 28 mm)	~	~	~
A2440332	Definitive impactor anti-luxation insert (head Ø 32 mm)	~	~	~
A2440336	Definitive impactor anti-luxation insert (head Ø 36 mm)		\checkmark	~



A1702000

BOX QUARTER REAMERS Ø38-68

		SET 1	SET 2	SET 3
A1701075	Handle for acetabular reamer driver AO (x2)	~	~	~
A1700380	Adaptor Jacobs male - AO reamer female	\checkmark	~	~
F1701038	Acetabular reamer Ø 38 mm	\checkmark	~	~
F1701040	Acetabular reamer Ø 40 mm	\checkmark	~	~
F1701042	Acetabular reamer Ø 42 mm	\checkmark	~	~
A1701044	Acetabular reamer Ø 44 mm	~	~	~
A1701046	Acetabular reamer Ø 46 mm	~	~	~
A1701048	Acetabular reamer Ø 48 mm	~	~	~
A1701050	Acetabular reamer Ø 50 mm	\checkmark	~	~
A1701052	Acetabular reamer Ø 52 mm	\checkmark	~	~
A1701054	Acetabular reamer Ø 54 mm	\checkmark	~	~
A1701056	Acetabular reamer Ø 56 mm	\checkmark	\checkmark	~
A1701058	Acetabular reamer Ø 58 mm	\checkmark	~	~
A1701060	Acetabular reamer Ø 60 mm	\checkmark	~	~
A1701062	Acetabular reamer Ø 62 mm	~	~	~
A1701064	Acetabular reamer Ø 64 mm	~	~	~
F1701066	Acetabular reamer Ø 66 mm	~	~	~
F1701068	Acetabular reamer Ø 68 mm	~	~	~

TRIAL INSERTS Ø 22 mm

ANTI-LUXATION

Cup	Head	Ref.	SET 1	SET 2	SET 3
Ø 40 mm	Ø 22 mm	A2432240	~	~	~
Ø 42 mm	Ø 22 mm	A2432242	~	~	~
Ø 44 mm	Ø 22 mm	A2432244	~	~	~
Ø 46 mm	Ø 22 mm	A2432246	~	~	~



TRIAL INSERTS Ø 28 mm

ANTI-LUXATION

Cup	Head	Ref.	SET 1	SET 2	SET 3
Ø 44 mm	Ø 28 mm	A2432844	~	~	~
Ø 46 mm	Ø 28 mm	A2432846	~	~	~
Ø 48 mm	Ø 28 mm	A2432848	~	~	~
Ø 50 mm	Ø 28 mm	A2432850	~	~	~
Ø 52 mm	Ø 28 mm	A2432852	~	~	~
Ø 54 mm	Ø 28 mm	A2432854	~	~	~
Ø 56 mm	Ø 28 mm	A2432856	~	~	~
Ø 58 mm	Ø 28 mm	A2432858	~	~	~
Ø 60 mm	Ø 28 mm	A2432860	~	~	~
Ø 62 mm	Ø 28 mm	A2432862	~	~	~
Ø 64 mm	Ø 28 mm	A2432864	~	~	~
Ø 66 mm	Ø 28 mm	A2432866	~	~	~
Ø 68 mm	Ø 28 mm	A2432868	~	~	~



Cup	Head	Ref.
Ø 44 mm	Ø 28 mm	A2422844
Ø 46 mm	Ø 28 mm	A2422846
Ø 48 mm	Ø 28 mm	A2422848
Ø 50 mm	Ø 28 mm	A2422850
Ø 52 mm	Ø 28 mm	A2422852
Ø 54 mm	Ø 28 mm	A2422854
Ø 56 mm	Ø 28 mm	A2422856
Ø 58 mm	Ø 28 mm	A2422858
Ø 60 mm	Ø 28 mm	A2422860
Ø 62 mm	Ø 28 mm	A2422862
Ø 64 mm	Ø 28 mm	A2422864
Ø 66 mm	Ø 28 mm	A2422866
Ø 68 mm	Ø 28 mm	A2422868

Available on demand. Not included in any of the sets 1, 2 or 3.



TRIAL INSERTS Ø 32 mm

ANTI-LUXATION

Cup	Head	Ref.	SET 1	SET 2	SET 3
Ø 48 mm	Ø 32 mm	A2433248	~	~	~
Ø 50 mm	Ø 32 mm	A2433250	~	~	~
Ø 52 mm	Ø 32 mm	A2433252	~	~	~
Ø 54 mm	Ø 32 mm	A2433254	~	~	~
Ø 56 mm	Ø 32 mm	A2433256	~	~	~
Ø 58 mm	Ø 32 mm	A2433258	~	~	~
Ø 60 mm	Ø 32 mm	A2433260	~	~	~
Ø 62 mm	Ø 32 mm	A2433262	~	~	~
Ø 64 mm	Ø 32 mm	A2433264	~	~	~
Ø 66 mm	Ø 32 mm	A2433266	~	~	~
Ø 68 mm	Ø 32 mm	A2433268	~	~	~



Cup	Head	Ref.
Ø 48 mm	Ø 32 mm	A2423248
Ø 50 mm	Ø 32 mm	A2423250
Ø 52 mm	Ø 32 mm	A2423252
Ø 54 mm	Ø 32 mm	A2423254
Ø 56 mm	Ø 32 mm	A2423256
Ø 58 mm	Ø 32 mm	A2423258
Ø 60 mm	Ø 32 mm	A2423260
Ø 62 mm	Ø 32 mm	A2423262
Ø 64 mm	Ø 32 mm	A2423264
Ø 66 mm	Ø 32 mm	A2423266
Ø 68 mm	Ø 32 mm	A2423268

Available on demand. Not included in any of the sets 1, 2 or 3.



TRIAL INSERTS Ø 36 mm

ANTI-LUXATION

Cup	Head	Ref.	SET 1	SET 2	SET 3
Ø 52 mm	Ø 36 mm	A2433652		~	~
Ø 54 mm	Ø 36 mm	A2433654		~	~
Ø 56 mm	Ø 36 mm	A2433656		~	~
Ø 58 mm	Ø 36 mm	A2433658		~	~
Ø 60 mm	Ø 36 mm	A2433660		~	~
Ø 62 mm	Ø 36 mm	A2433662		~	~
Ø 64 mm	Ø 36 mm	A2433664		~	~
Ø 66 mm	Ø 36 mm	A2433666		~	~
Ø 68 mm	Ø 36 mm	A2433668		~	~

NEUTRAL

Cup	Head	Ref.	SET 1	SET 2	SET 3
Ø 52 mm	Ø 36 mm	A2423652			~
Ø 54 mm	Ø 36 mm	A2423654			~
Ø 56 mm	Ø 36 mm	A2423656			~
Ø 58 mm	Ø 36 mm	A2423658			~
Ø 60 mm	Ø 36 mm	A2423660			~
Ø 62 mm	Ø 36 mm	A2423662			~
Ø 64 mm	Ø 36 mm	A2423664			~
Ø 66 mm	Ø 36 mm	A2423666			~
Ø 68 mm	Ø 36 mm	A2423668			~

TRIAL INSERTS Ø 40 mm

NEUTRAL

Cup	Head	Ref.
Ø 56 mm	Ø 40 mm	A2424056
Ø 58 mm	Ø 40 mm	A2424058
Ø 60 mm	Ø 40 mm	A2424060
Ø 62 mm	Ø 40 mm	A2424062
Ø 64 mm	Ø 40 mm	A2424064
Ø 66 mm	Ø 40 mm	A2424066
Ø 68 mm	Ø 40 mm	A2424068

Available on demand. Not included in any of the sets 1, 2 or 3.



TRIAL FEMORAL HEADS

Diametre	Neck	Ref.	SET 1	SET 2	SET 3	
Ø 22 mm	Short	A1536160	~	~	~	
Ø 22 mm	Medium	A1536161	~	~	~	
Ø 22 mm	Long	A1536162	~	~	~	
Ø 28 mm	Short	A1536140	~	~	~	
Ø 28 mm	Medium	A1536141	~	~	~	
Ø 28 mm	Long	A1536142	~	~	~	
Ø 28 mm	Extra Long	A1536143	~	~	~	
Ø 32 mm	Short	A1536113	~	~	~	
Ø 32 mm	Medium	A1536114	~	~	~	
Ø 32 mm	Long	A1536115	~	~	~	
Ø 32 mm	Extra Long	A1536116	~	~	~	
Ø 36 mm	Short	A1536070		~	~	
Ø 36 mm	Medium	A1536071		~	~	
Ø 36 mm	Long	A1536072		~	~	
Ø 36 mm	Extra Long	A1536073		~	~	
Ø 40 mm	Short	A1536080	Available on demand.			
Ø 40 mm	Medium	A1536081				
Ø 40 mm	Long	A1536082				
Ø 40 mm	Extra Long	A1536083	Not included in any of the sets 1, 2 or 3.			

POLYPROPYLENE TRIAL FEMORAL HEAD FOR STEM



TRIAL FEMORAL HEADS

Diametre	Neck	Ref.	SET 1	SET 2	SET 3		
Ø 22 mm	Short	A1550160	~	~	~		
Ø 22 mm	Medium	A1550161	~	~	~		
Ø 22 mm	Long	A1550162	~	~	~		
Ø 28 mm	Short	A1550140	~	~	~		
Ø 28 mm	Medium	A1550141	~	~	~		
Ø 28 mm	Long	A1550142	~	~	~		
Ø 28 mm	Extra Long	A1550143	~	~	~		
Ø 32 mm	Short	A1556126	~	~	~		
Ø 32 mm	Medium	A1550127	~	~	~		
Ø 32 mm	Long	A1550128	~	~	~		
Ø 32 mm	Extra Long	A1550129	~	~	~		
Ø 36 mm	Short	A1550070		~	~		
Ø 36 mm	Medium	A1550071		~	~		
Ø 36 mm	Long	A1550072		~	~		
Ø 36 mm	Extra Long	A1550073		~	~		
Ø 40 mm	Short	A1550080	Available on demand. Not included in any of				
Ø 40 mm	Medium	A1550081					
Ø 40 mm	Long	A1550082					
Ø 40 mm	Extra Long	A1550083	the sets 1, 2 or 3.				

POLYPROPYLENE TRIAL FEMORAL HEADS FOR BROACHES



ANTERIOR APPROACH IMPACTOR for QUARTER CUP



Ref. A2440006

QUARTER CUP OFFSET IMPACTOR Available on demand. Not included in any of the sets 1, 2 or 3.

HANDLE FOR ACETABULAR REAMER ANTERIOR APPROACH







Surgival has been manufacturing and distributing implants and instruments for Orthopaedic Surgery and Traumatology for more than 30 years.

We are proud to think that our systems facilitate the daily work of the best specialists in their surgeries and contribute to restore mobility to thousands of people every year.

#TogetherForABetterFuture





ICQUARTERCTEN/ 03-2023 © El marcado CE es válido únicamente si también está impreso en la etiqueta del producto.



HEADQUARTERS & INTERNACIONAL:

Leonardo Da Vinci, 12-14

Parque Tecnológico Paterna

SPAIN DISTRIBUTION:



lgnasi Iglesias, 70 Esplugues de Llobregat

www.surgival.com

P



surgival@surgival.com