

# INITIALE®

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Cemented stem

Standard, Dysplasia and Revision

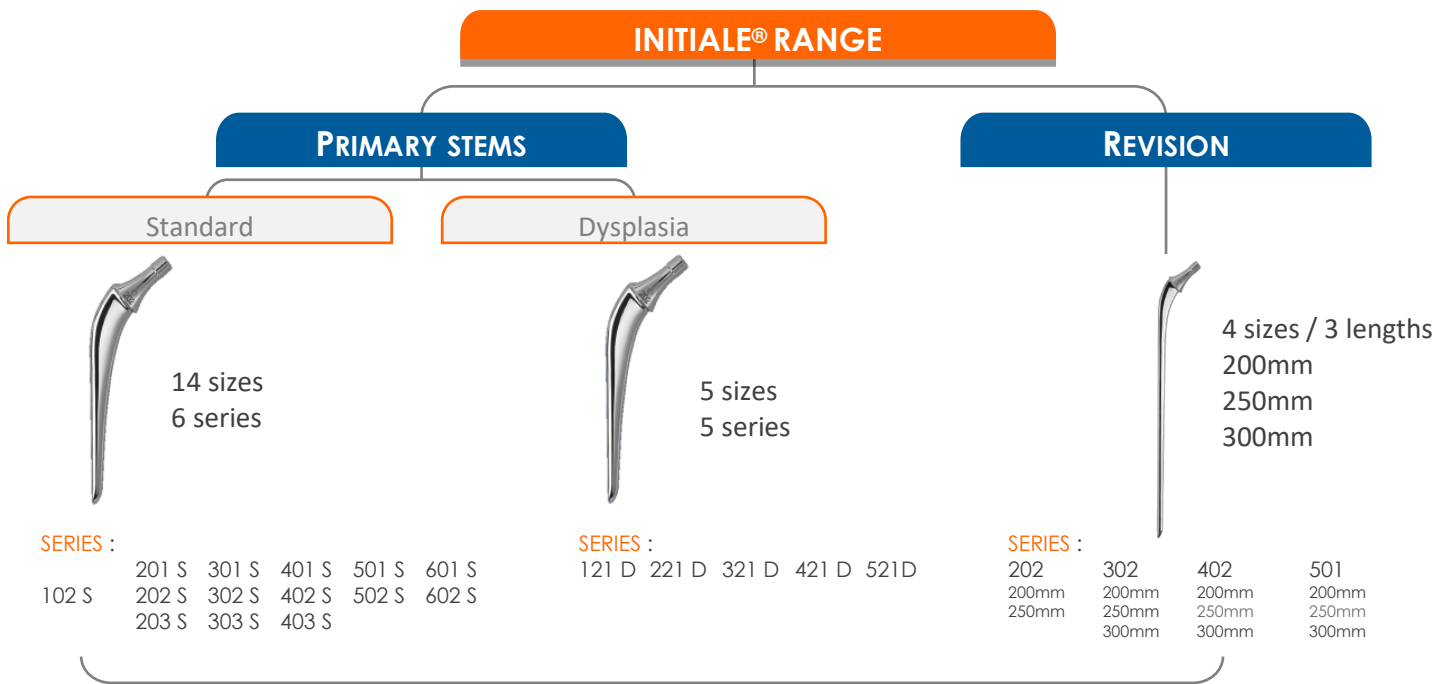


Surgical Technique  
Conventional  
instrumentation




AMPLITUDE®



# INITIALE® STRAIGHT CEMENTED FEMORAL STEM



**FEMORAL HEADS 10/12**

Ceramic		Ceramic revision		Metallic	
 Sizes 28 – 32 – 36 mm		 Sizes 28 – 32 – 36 mm		 Sizes 22,2 – 28 – 32 mm	
BIOLOX® delta		BIOLOX® delta		M30NW	
Size	Neck Length	Size	Neck Length	Size	Neck Length
-	-	-	-	Ø 22,2 mm	SN -2mm MN 0mm LN +2mm
Ø 28 mm	SN -3,5mm MN 0mm LN +3,5mm	Ø 28 mm	SN -3mm MN 0mm LN +4mm	Ø 28 mm	SN -3,5mm MN 0mm LN +3,5mm XLN +7,5mm
Ø 32 mm	SN -4mm MN 0mm LN +4mm	Ø 32 mm	SN -3mm MN 0mm LN +4mm	Ø 32 mm	SN +4mm MN 0mm LN +4mm
Ø 36 mm	SN -4mm MN 0mm LN +4mm	Ø 36 mm	SN -3mm MN 0mm LN +4mm		

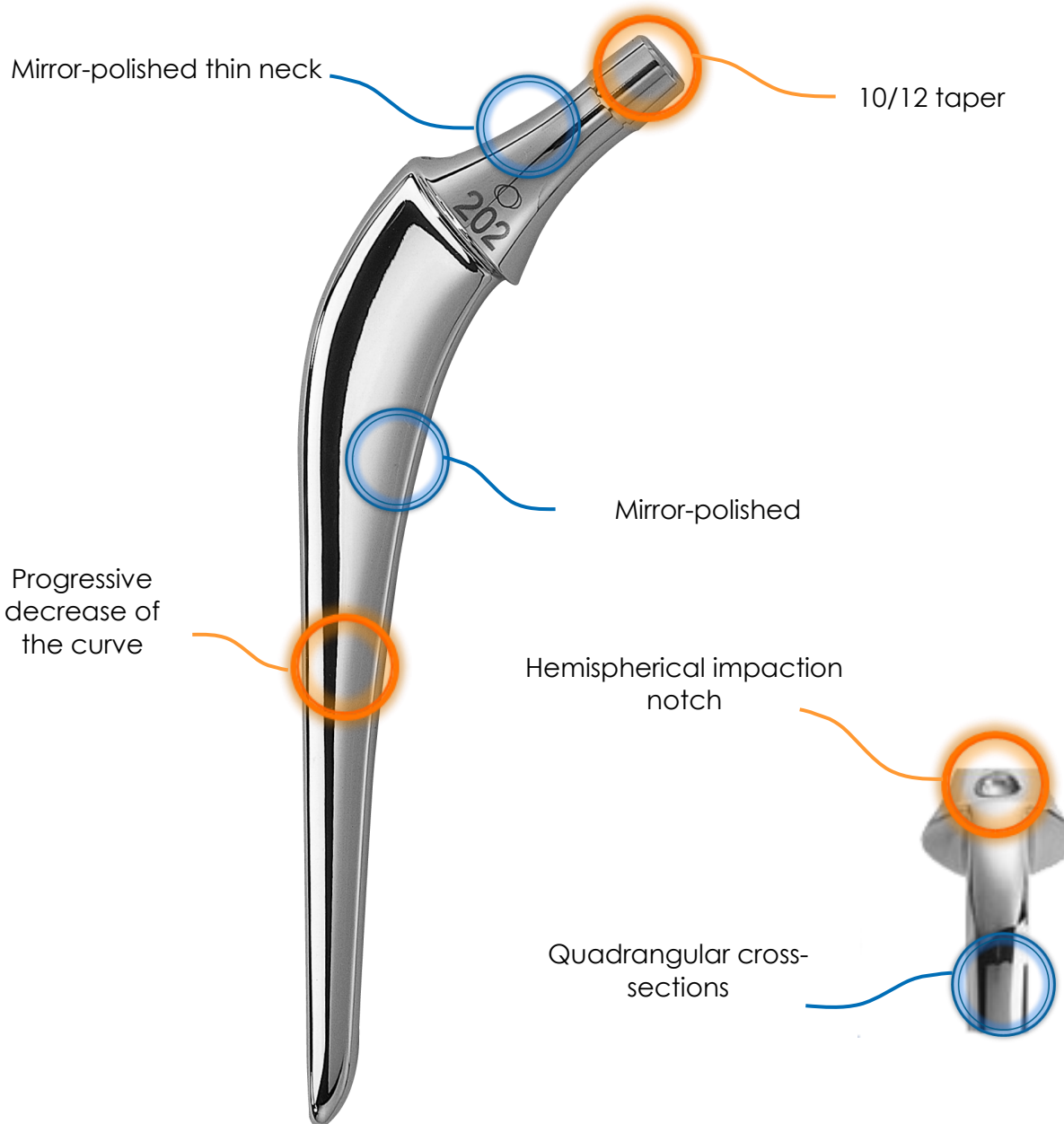
SN = Short Neck ; MN = Medium Neck ; LN = Long Neck ; XLN = Extra-Long Neck

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

## Design:

INITIALE<sup>®</sup> straight femoral stems are intended for use with cement. Neck-shaft angle evolves with size. Intramedullary shape is defined by a progressive decrease of the curve in the frontal plane.

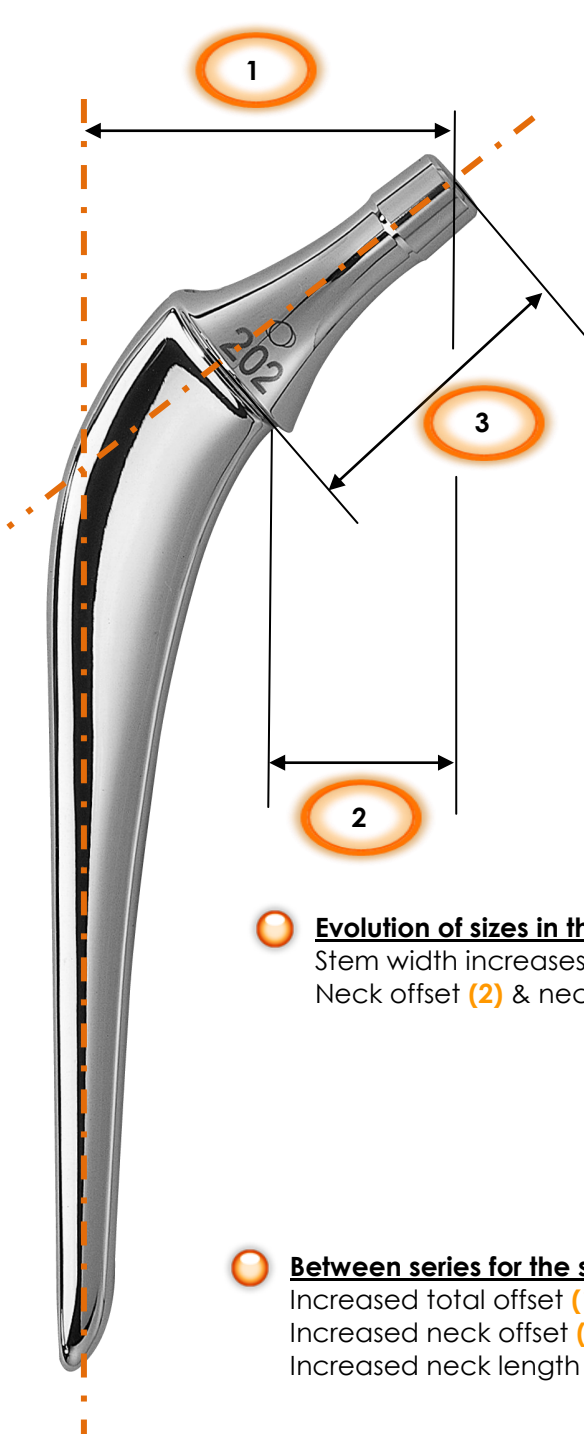
**Cross-section of the stem is quadrangular.**



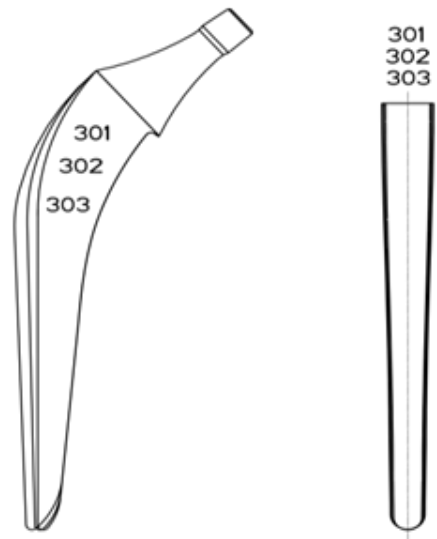
**Material:** M30NW Stainless Steel

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

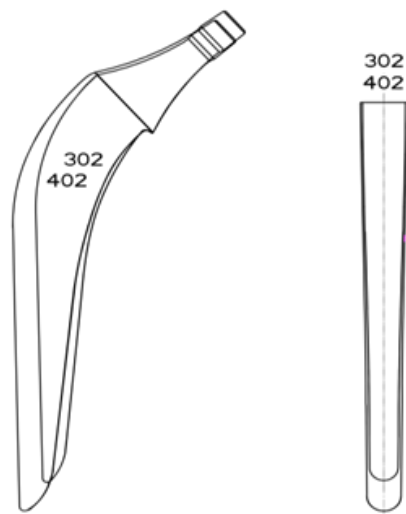
## Evolution:



- 1 Total Offset
- 2 Neck Offset
- 3 Neck length



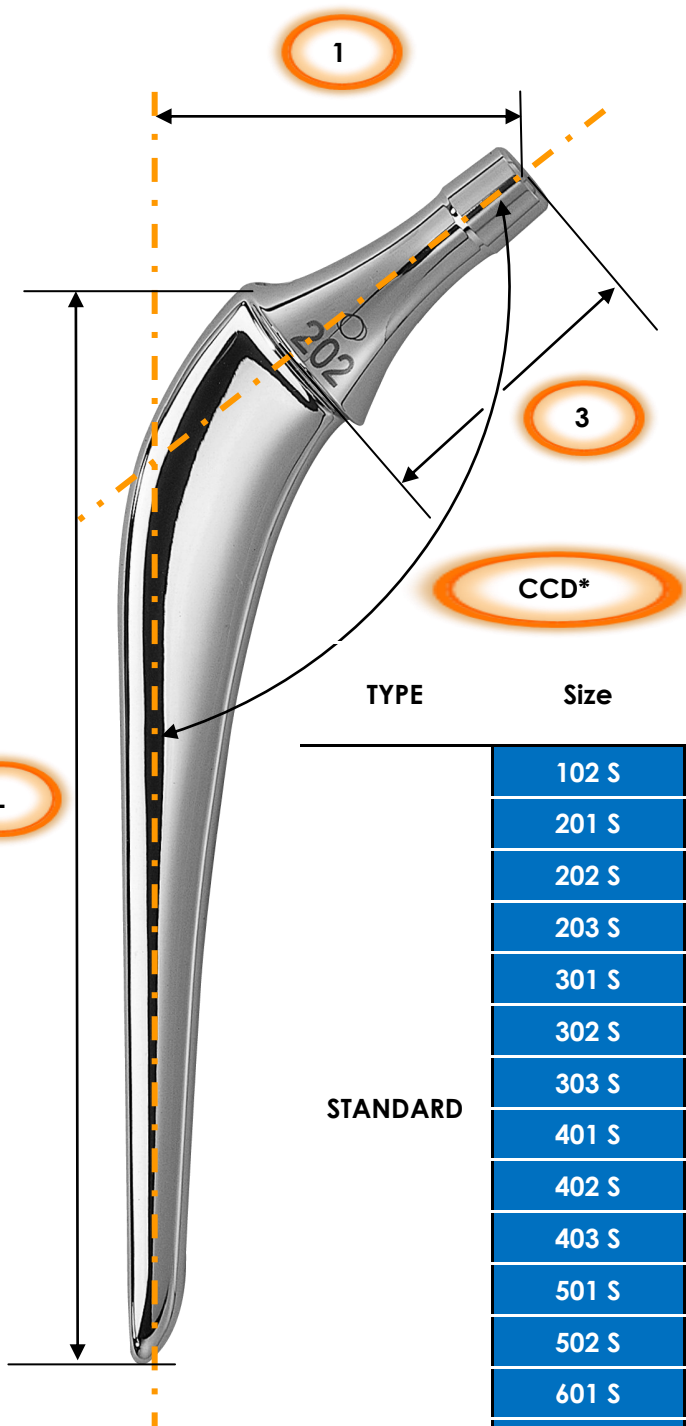
- **Evolution of sizes in the same series:**  
Stem width increases => intra-medullary congruency (1).  
Neck offset (2) & neck length (3) stay the same.



- **Between series for the same size:**  
Increased total offset (1).  
Increased neck offset (2).  
Increased neck length (3).

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

## Evolution:



**302S**

- S => Standard
- D => Dysplasia
- R => Revision

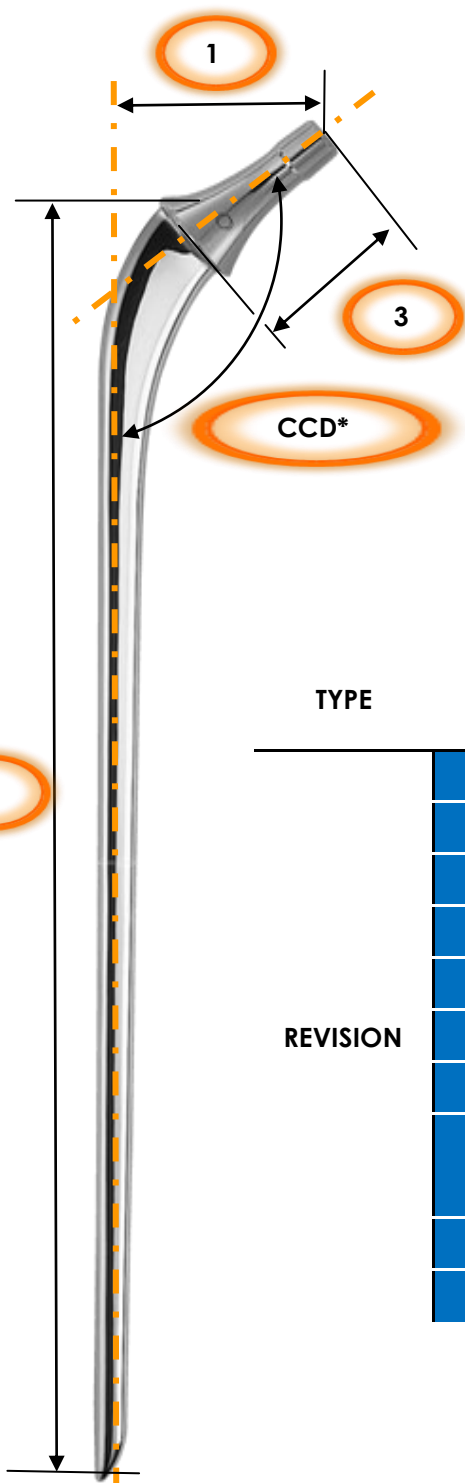
300 => identifies the series

2 => Stem size number in the series

TYPE	Size	CCD* *Neck-shaft angle	1	L	3
STANDARD	102 S	129.3°	37	120	28
	201 S	129.3°	41		
	202 S	128.7°	42	135	32
	203 S	128.1°	44		
	301 S	130°	47		
	302 S	128.8°	49	140	36
	303 S	128.1°	52		
	401 S	130°	55		
	402 S	128.8°	56	150	40
	403 S	127.3°	60		
	501 S	130°	53		
	502 S	129°	56	160	47
	601 S	130°	58		
602 S	128.9°	61	165	55	
DYSPLASIA	121 D	130°	30	120	24
	221 D		35	130	32
	321 D		38	140	36
	421 D		41	150	40
	521 D		46	160	47

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

## Evolution:



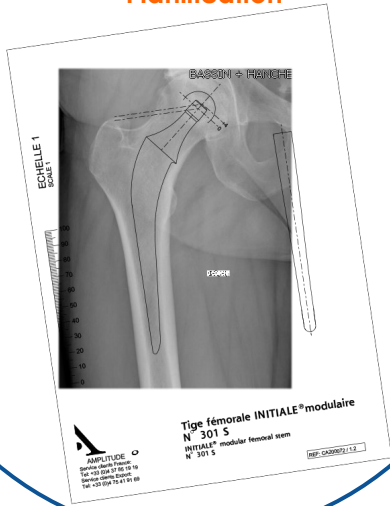
- 1** Total offset
- L** Stem length
- 3** Neck length

TYPE	Size	CCD* *Neck-shaft angle	1	L	3
REVISION	202-200	129°	42	200	32
	202-250			250	
	302-200		49	200	36
	302-250			250	
	302-300			300	
	402-200	56	200	40	
	402-250		250		
	402-300		300		
	501-200	130°	53	200	47
	501-250			250	
501-300	300				

# SURGICAL TECHNIQUE OVERVIEW

1

Planification



2

Femoral neck resection



3

Broaching



4

Trials on trial stem





# SURGICAL TECHNIQUE OVERVIEW

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5

Cement restrictor insertion



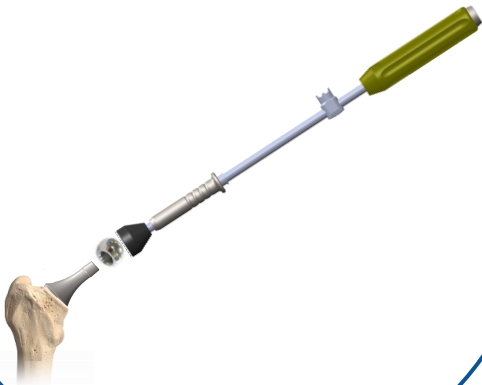
6

Final stem impaction

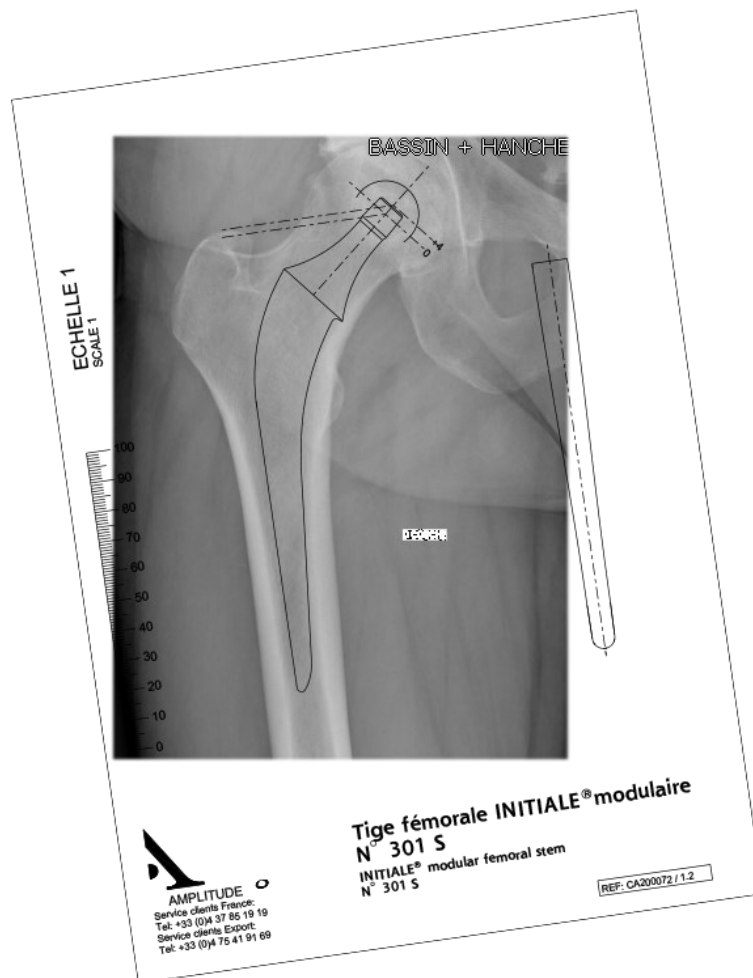


7

Head impaction and joint reduction



## PREOPERATIVE PLANNING



Pre-op planning is an important step to determine the implant size most adapted to restore the patient's anatomy. It must take into account anatomical and quality factors (bone quality, bone density, patient's morphology).

INITIALE<sup>®</sup> femoral stem features several offset options and different angles (see pages 6 & 7), and the range is comprised of standard, dysplasia and revision versions.

- It is advised to choose an implant size allowing optimal fill of the femoral canal, leaving an even cement mantle around the stem.
- Stem choice and neck resection level must bring the best leg length and offset restoration possible. Neck resection level must be assessed closely.

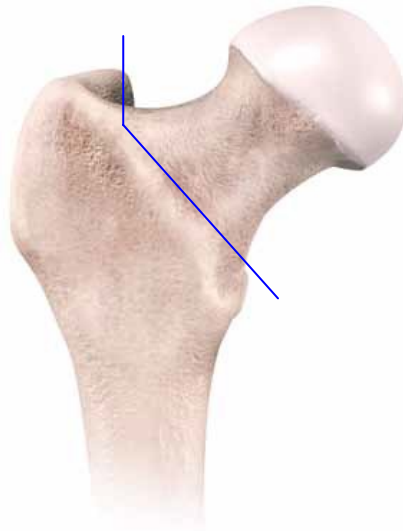
### REMINDER

This surgical technique is intended for proper use of the instrumentation set. The surgical approach and the operating technique are entirely under the surgeon's responsibility.

### NOTE

The x-ray templates are provided at a scale of 1:15, and can be provided with a personalized scale on request.

## FEMORAL NECK RESECTION



Neck resection level, defined by templating, is reproduced based on anatomical landmarks (greater trochanter, lesser trochanter, trochanteric fossa).

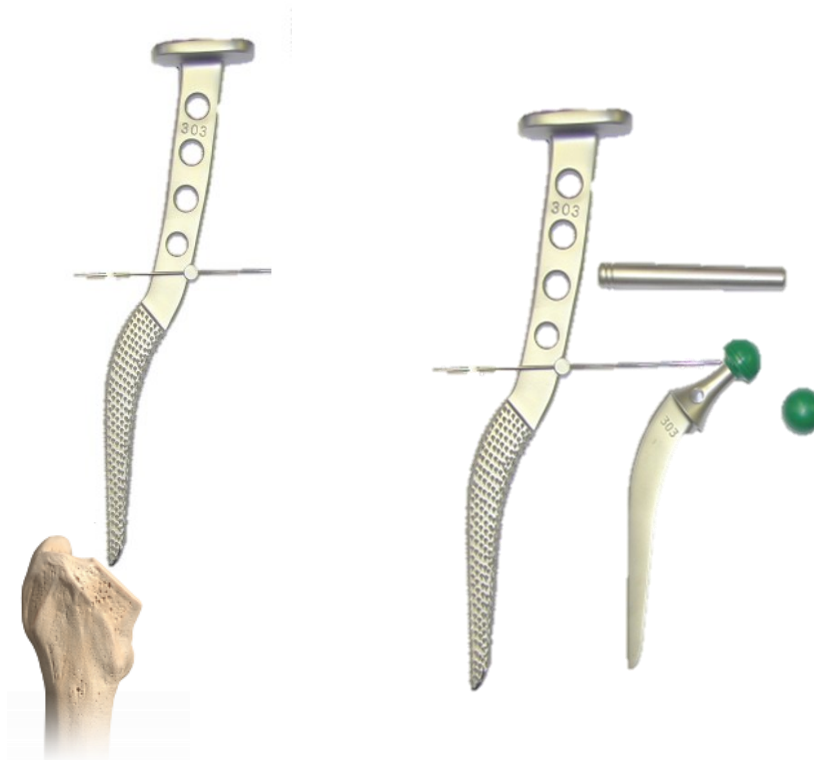
As the stem features a collar, it is necessary to orient the resection in the sagittal plane in order to obtain the desired anteversion.

Medullary canal broaching can be performed before or after acetabular preparation.

Neck resection can be done before or after femoral head dislocation. Start by hollowing the femoral neck from its trabecular bone (some amount can be kept in order to be used as cement distal plug if necessary). Make sure to carefully prepare the supero-external part of the neck to avoid any varus positioning of the stem.

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

## BROACHING



### Femoral canal opening:

Femoral canal is prepared with the smallest broach, then with increasing broaches.

### Metaphyseal preparation:

Broach successively until templated size has been reached. Broaches are slightly oversized and feature teeth in order to have enough clearance for bone cement.

To control leg length, insert the blunt K-wire in the broach handle. This represents the horizontal projection of a medium neck femoral head.

### NOTE

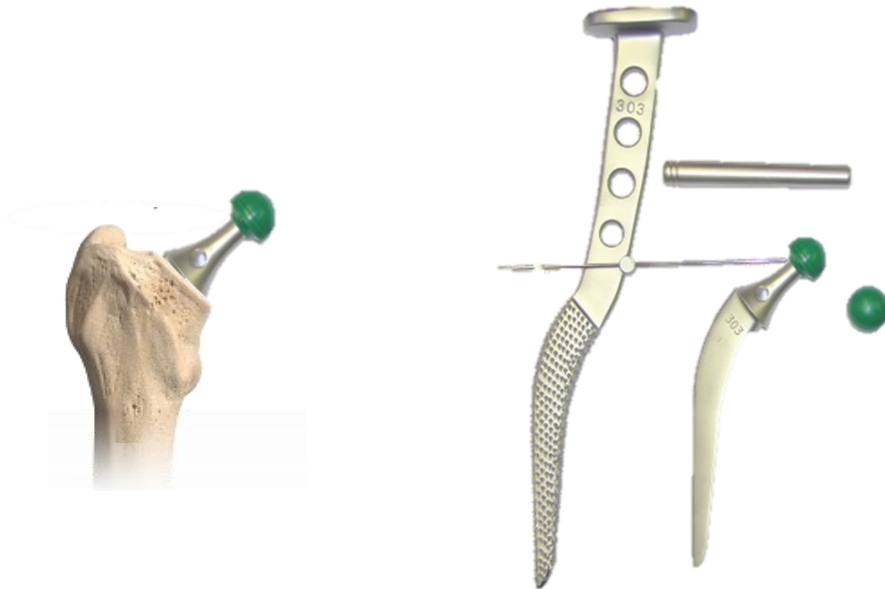
For INITIALE<sup>®</sup> Revision, ream the diaphyseal canal over at least the length of the final stem

### NOTE

INITIALE<sup>®</sup> broaches range offers several broach designs adapted to the surgical approach (Direct anterior, antero-lateral, posterior)

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

## TRIALS ON TRIAL STEM



Choose the trial stem of the same size as the last broach. Place the trial stem in the femur, with a trial head of the desired size and length.



Ø22.2mm



Ø28mm



Ø32mm



Ø36mm



Short neck



Medium neck



Long neck



Extra-long neck

Reduce the joint using the femoral head impaction, assembled on the universal handle. Test range of motion and joint stability (no impingement) in order to validate extra-medullary settings.

Check rotational stability of the trial stem, collar matching with neck resection, and anteversion with the broach handle extraction shaft.

### NOTE

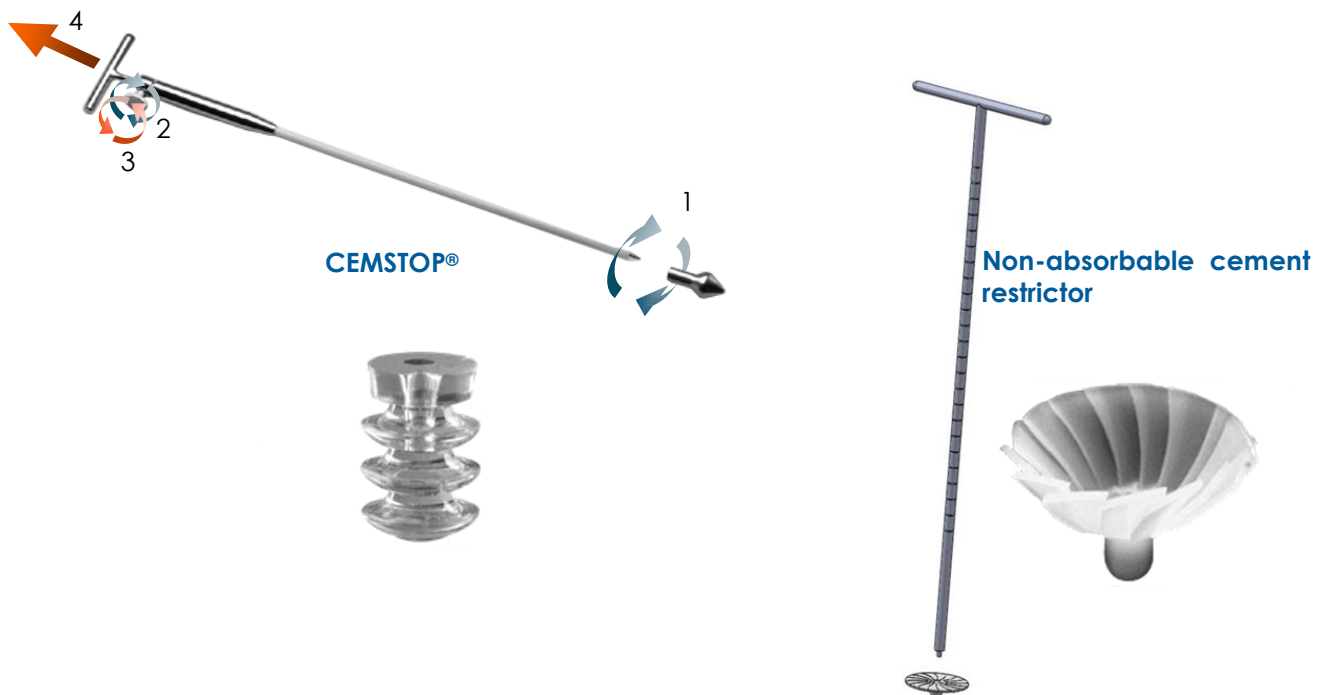
Perform trials until reaching anteversion and neck length that offers the best stability and range of motion.

### NOTE

Blunt K-wire placed in the broach handle allows visual assessment of the medium neck head center to reproduce templating.

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

## CEMENT RESTRICTOR INSERTION



Wash and dry the intramedullar femoral cavity. Femoral canal obturation should be performed according to the surgeon's habits. The AMPLITUDE range offers the CEMSTOP<sup>®</sup> absorbable restrictor and a non-absorbable UHMWPE restrictor.

Introduce the cement restrictor according to following instructions depending on the model used:

### CEMSTOP<sup>®</sup> :

- Based on femoral canal preparation, determine in the instrumentation the adequate trial "olive" diameter and assemble it on the handle by threading it completely (1).
- Tighten the holding screw on the body of the inserter (2).
- Compare the length with the validated broach by using a landmark that can be used to determine adequate insertion depth.
- Insert in the femoral canal until determined depth is reached to assess the diameter. Repeat trials until diameter has been validated. Remove the trial "olive" by unthreading it.
- Choose the CEMSTOP<sup>®</sup> restrictor of the same size as the validated trial "olive", assemble it on the inserter, and insert it in the femoral canal.
- Unthread the holding screw (3) and pull the handle to leave the CEMSTOP<sup>®</sup> restrictor in place (4).

### Non-absorbable Cement Restrictor:

- Assemble the non-absorbable restrictor on the introducer.
- The graduation on the inserter indicates insertion depth. Compare with the validated broach by using a landmark that can be used to determine adequate insertion depth. Add 1cm to ensure positioning well below the stem.
- Insert in the femoral canal until determined depth is reached.
- Remove the inserter to leave the restrictor in place

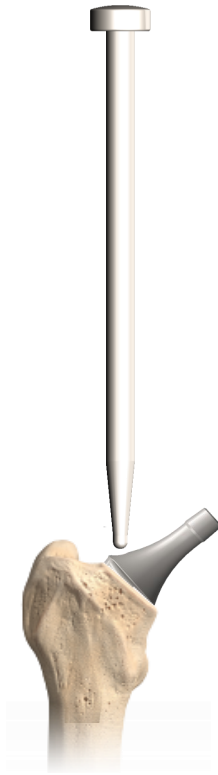
### NOTE

Follow the instruction for use of the cement being used

# INITIALE<sup>®</sup> STRAIGHT CEMENTED FEMORAL STEM

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## FINAL STEM INSERTION



Following probable muscular or bone reinsertion wires, the medullary canal is washed and dried. Cement is introduced using a bone syringe in the canal. Obturation of the canal is made based on the surgeon's habits.

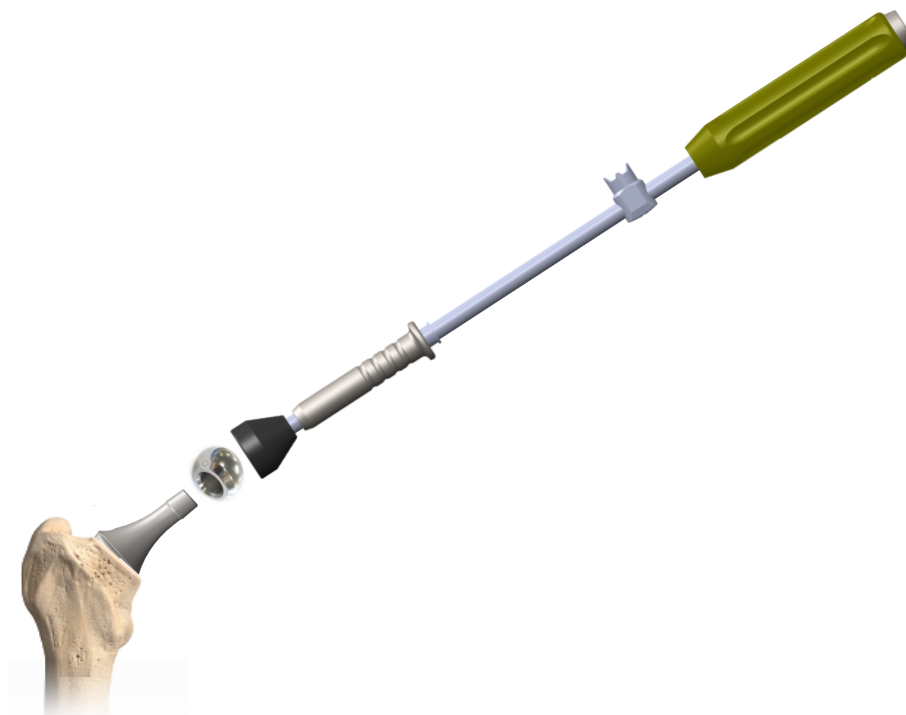
Prosthesis is inserted in the femur and maintained in place until complete cement polymerization thanks to the stem impactor.

It is then possible to perform new trials with trial heads on the stem if necessary (to validate neck length and articular stability).

### NOTE

Follow instructions for use of the cement being used

## FINAL HEAD IMPACTION



Select final femoral head that matches settings validated during trials.

### > Impaction of metallic head:

Make sure the stem taper is clean, dry and undamaged, then position the head manually until it is firmly seated on the taper.

Use the head impactor assembled on the universal handle to impact it axially. Reduce the joint.

### > Impaction of ceramic head:

Before placing the ceramic head onto femoral stem:

- Carefully rinse and dry the stem taper.
- Meticulously inspect the stem taper and female head taper, and remove any foreign body.

Manually place the head onto stem taper by gently turning it while pushing it along the taper axis until it is firmly seated.

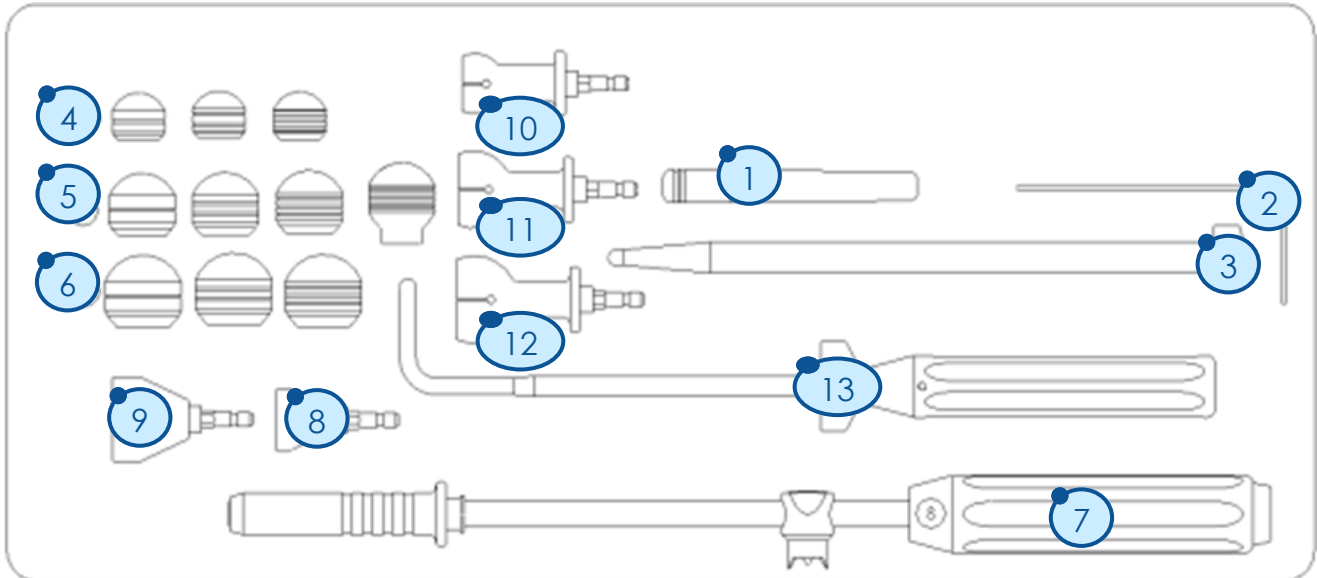
Use the head impactor assembled on the universal handle to impact it axially. Reduce the joint.





# INSTRUMENTATION

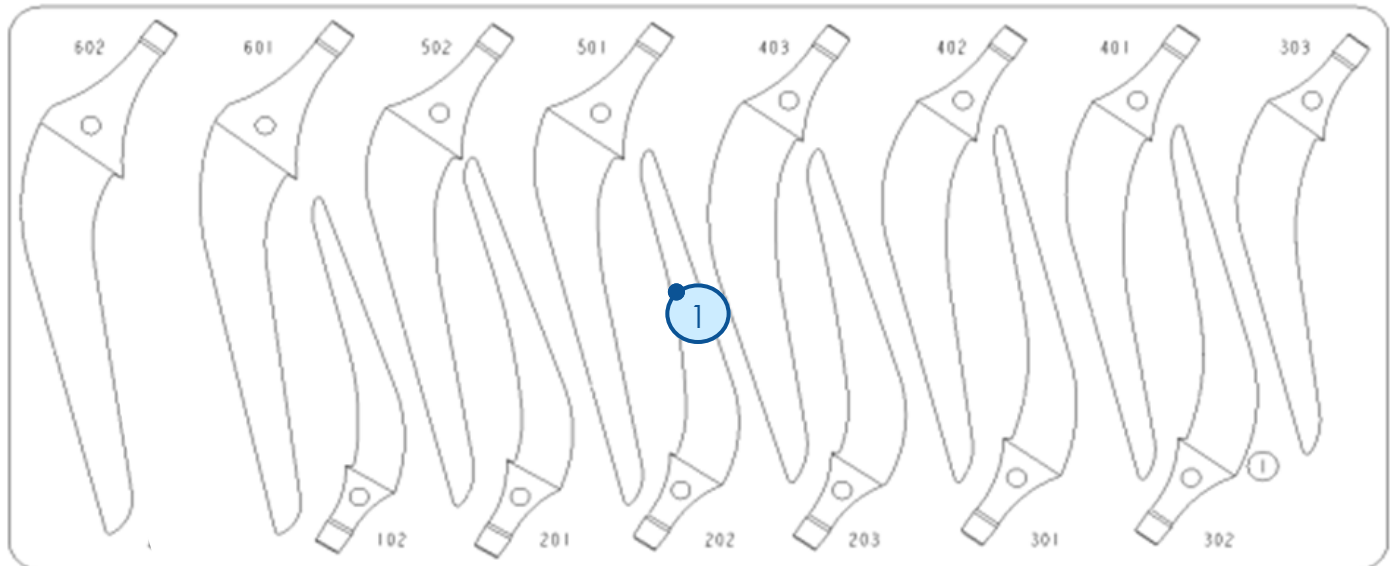
## STANDARD TRIAL SET



Item	Description	Reference	Qty
1	Broach handle extraction shaft	2-0104700	1
2	Alignment Pin Ø 2 A/P	2-0114000	1
3	Femoral stem impactor	2-0104800	1
4	Trial Head on stem Ø22.2 Short Neck	2-0100405	1
4	Trial Head on stem Ø22.2 Medium Neck	2-0100406	1
4	Trial Head on stem Ø22.2 Long Neck	2-0100407	1
5	Trial Head on stem Ø28 Short Neck	2-0100401	1
5	Trial Head on stem Ø28 Medium Neck	2-0100402	1
5	Trial Head on stem Ø28 Long Neck	2-0100403	1
5	Trial Head on stem Ø28 Extra-Long Neck	2-0100404	1
6	Trial Head on stem Ø32 Short Neck	2-0100408	1
6	Trial Head on stem Ø32 Medium Neck	2-0100409	1
6	Trial Head on stem Ø32 Long Neck	2-0100410	1
7	Universal Handle - Conventional/navigated	2-0117600	1
8	Impactor for Ø22.2 Heads	2-0101400	1
9	Impactor for Ø28 and Ø32 Heads	2-0114200	1
10	Femoral head gripping tip Ø 22.2	2-0104322	1
11	Femoral head gripping tip Ø 28	2-0104328	1
12	Femoral head gripping tip Ø 32	2-0104332	1
13	Trial stem extractor	2-0106700	1

# INSTRUMENTATION

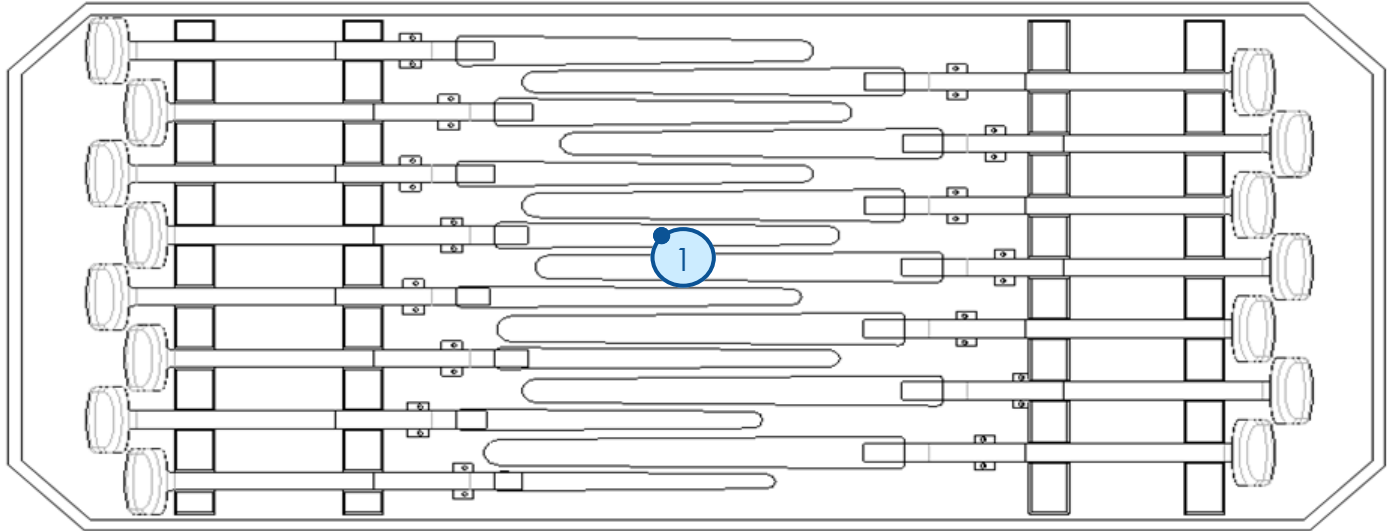
## STANDARD TRIAL SET



Item	Description	Reference	Qty
1	Trial INITIALE femoral stem N° 102S	2-0180102	1
1	Trial INITIALE femoral stem N° 201S	2-0180201	1
1	Trial INITIALE femoral stem N° 202S	2-0180202	1
1	Trial INITIALE femoral stem N° 203S	2-0180203	1
1	Trial INITIALE femoral stem N° 301S	2-0180301	1
1	Trial INITIALE femoral stem N° 302S	2-0180302	1
1	Trial INITIALE femoral stem N° 303S	2-0180303	1
1	Trial INITIALE femoral stem N° 401S	2-0180401	1
1	Trial INITIALE femoral stem N° 402S	2-0180402	1
1	Trial INITIALE femoral stem N° 403S	2-0180403	1
1	Trial INITIALE femoral stem N° 501S	2-0180501	1
1	Trial INITIALE femoral stem N° 502S	2-0180502	1
1	Trial INITIALE femoral stem N° 601S	2-0180601	1
1	Trial INITIALE femoral stem N° 602S	2-0180602	1

# INSTRUMENTATION

## FEMORAL PREPARATION SET

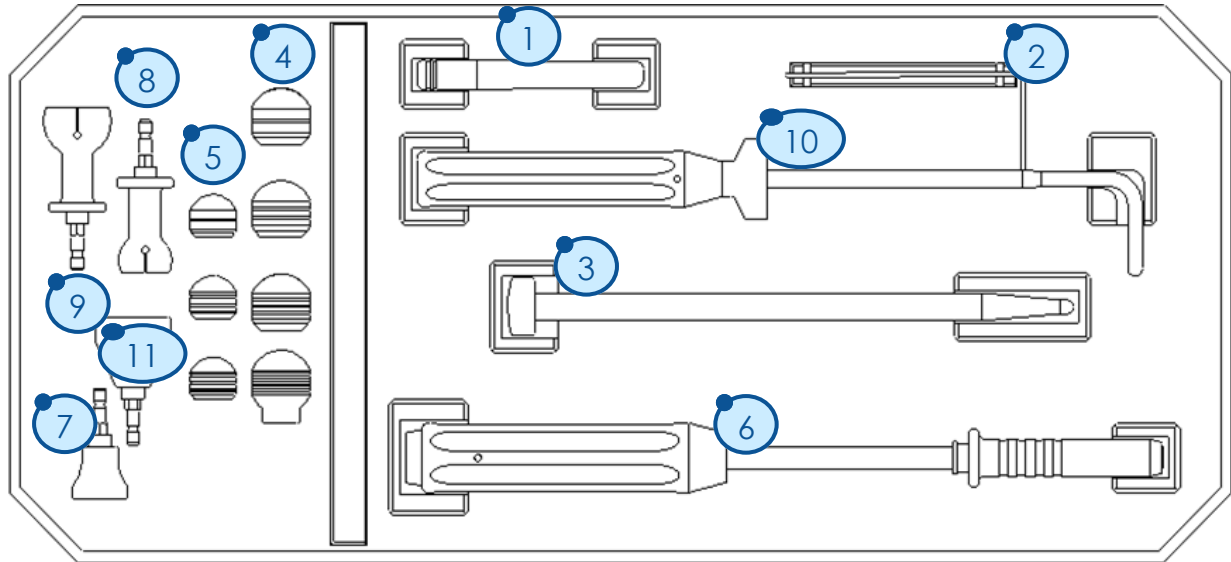


Item	Description	Reference	Qty
1	INITIALE femoral broach N°101S	2-0170101	1
1	INITIALE femoral broach N°102S	2-0170102	1
1	INITIALE femoral broach N°201S	2-0170201	1
1	INITIALE femoral broach N°202S	2-0170202	1
1	INITIALE femoral broach N°203S	2-0170203	1
1	INITIALE femoral broach N°301S	2-0170301	1
1	INITIALE femoral broach N°302S	2-0170302	1
1	INITIALE femoral broach N°303S	2-0170303	1
1	INITIALE femoral broach N°401S	2-0170401	1
1	INITIALE femoral broach N°402S	2-0170402	1
1	INITIALE femoral broach N°403S	2-0170403	1
1	INITIALE femoral broach N°501S	2-0170501	1
1	INITIALE femoral broach N°502S	2-0170502	1
1	INITIALE femoral broach N°601S	2-0170601	1
1	INITIALE femoral broach N°602S	2-0170602	1



# INSTRUMENTATION

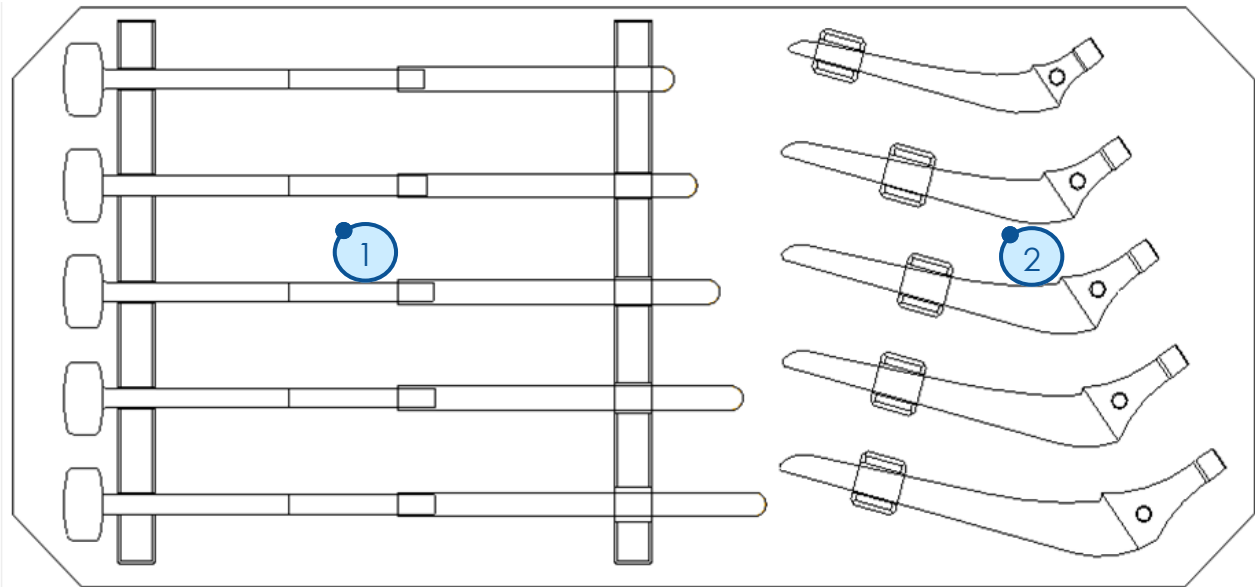
## DYSPLASIA TRIAL SET



Item	Description	Reference	Qty
1	Broach handle extraction shaft	2-0104700	1
2	Alignment Pin Ø 2 A/P	2-0114000	1
3	Femoral stem impactor	2-0104800	1
4	Trial Head on stem Ø28 Short Neck	2-0100401	1
4	Trial Head on stem Ø28 Medium Neck	2-0100402	1
4	Trial Head on stem Ø28 Long Neck	2-0100403	1
4	Trial Head on stem Ø28 Extra-Long Neck	2-0100404	1
5	Trial Head on stem Ø22.2 Short Neck	2-0100405	1
5	Trial Head on stem Ø22.2 Medium Neck	2-0100406	1
5	Trial Head on stem Ø22.2 Long Neck	2-0100407	1
6	Universal Handle	2-0101000	1
7	Impactor for Ø22.2 Heads	2-0101400	1
8	Femoral head gripping tip Ø 22.2	2-0104322	1
9	Femoral head gripping tip Ø 28	2-0104328	1
10	Trial stem extractor	2-0106700	1
11	Impactor for Ø28 and Ø32 Heads	2-0114200	1

# INSTRUMENTATION

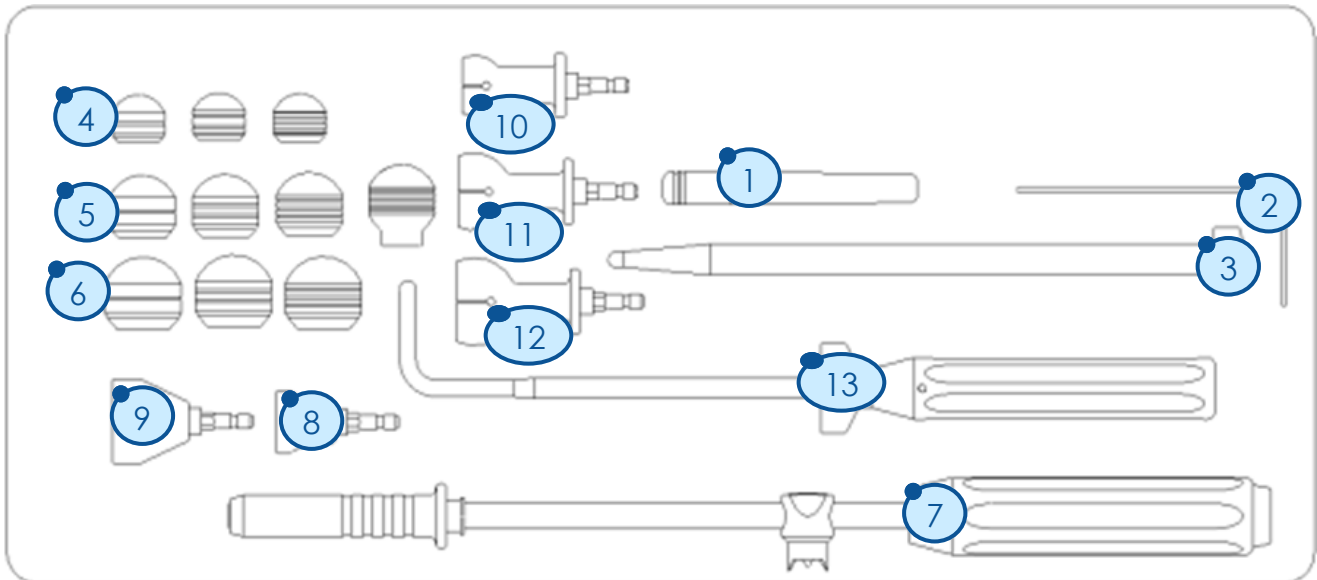
## DYSPLASIA TRIAL SET



Item	Description	Reference	Qty
1	INITIALE dysplasia femoral broach N° 121 D	2-0140121	1
1	INITIALE dysplasia femoral broach N° 221 D	2-0140221	1
1	INITIALE dysplasia femoral broach N° 321 D	2-0140321	1
1	INITIALE dysplasia femoral broach N° 421 D	2-0140421	1
1	INITIALE dysplasia femoral broach N° 521 D	2-0140521	1
2	Trial INITIALE Dysplasia femoral stem N° 121 D	2-0150121	1
2	Trial INITIALE Dysplasia femoral stem N° 221 D	2-0150221	1
2	Trial INITIALE Dysplasia femoral stem N° 321 D	2-0150321	1
2	Trial INITIALE Dysplasia femoral stem N° 421 D	2-0150421	1
2	Trial INITIALE Dysplasia femoral stem N° 521 D	2-0150521	1

# INSTRUMENTATION

## REVISION TRIAL SET

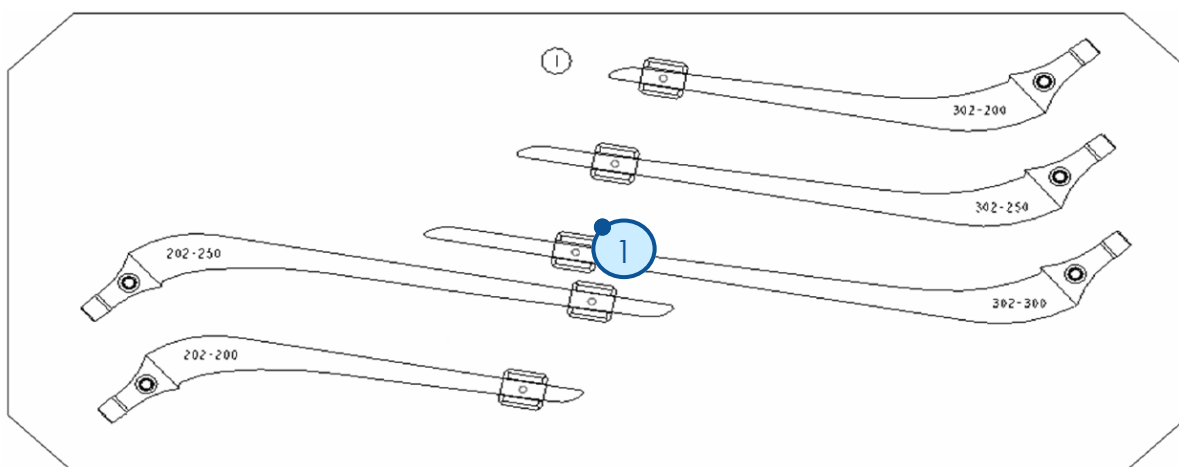


Item	Description	Reference	Qty
1	Broach handle extraction shaft	2-0104700	1
2	Alignment Pin Ø 2 A/P	2-0114000	1
3	Femoral stem impactor	2-0104800	1
4	Trial Head on stem Ø22.2 Short Neck	2-0100405	1
4	Trial Head on stem Ø22.2 Medium Neck	2-0100406	1
4	Trial Head on stem Ø22.2 Long Neck	2-0100407	1
5	Trial Head on stem Ø28 Short Neck	2-0100401	1
5	Trial Head on stem Ø28 Medium Neck	2-0100402	1
5	Trial Head on stem Ø28 Long Neck	2-0100403	1
5	Trial Head on stem Ø28 Extra-Long Neck	2-0100404	1
6	Trial Head on stem Ø32 Short Neck	2-0100408	1
6	Trial Head on stem Ø32 Medium Neck	2-0100409	1
6	Trial Head on stem Ø32 Long Neck	2-0100410	1
7	Universal Handle - Conventional/navigated	2-0117600	1
8	Impactor for Ø22.2 Heads	2-0101400	1
9	Impactor for Ø28 and Ø32 Heads	2-0114200	1
10	Femoral head gripping tip Ø 22.2	2-0104322	1
11	Femoral head gripping tip Ø 28	2-0104328	1
12	Femoral head gripping tip Ø 32	2-0104332	1
13	Trial stem extractor	2-0106700	1

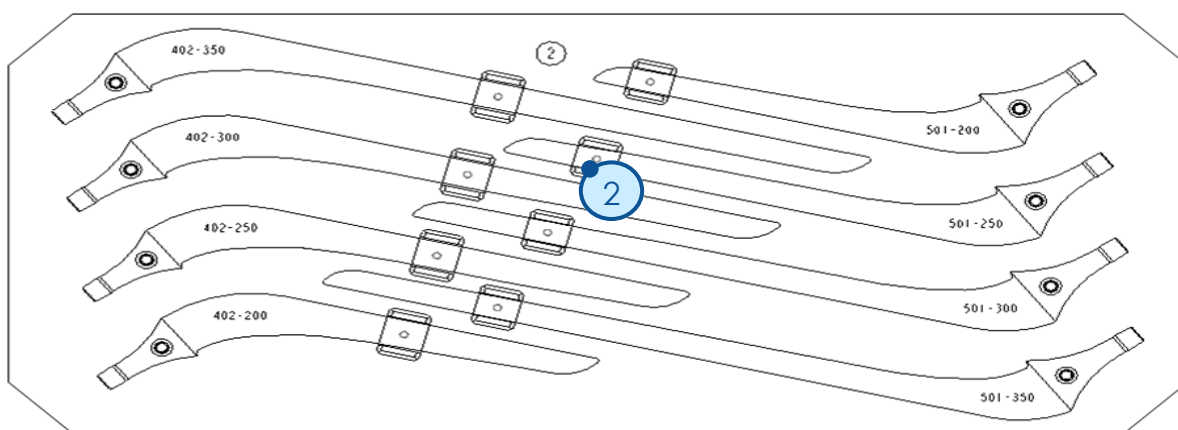


# INSTRUMENTATION

## REVISION TRIAL SET



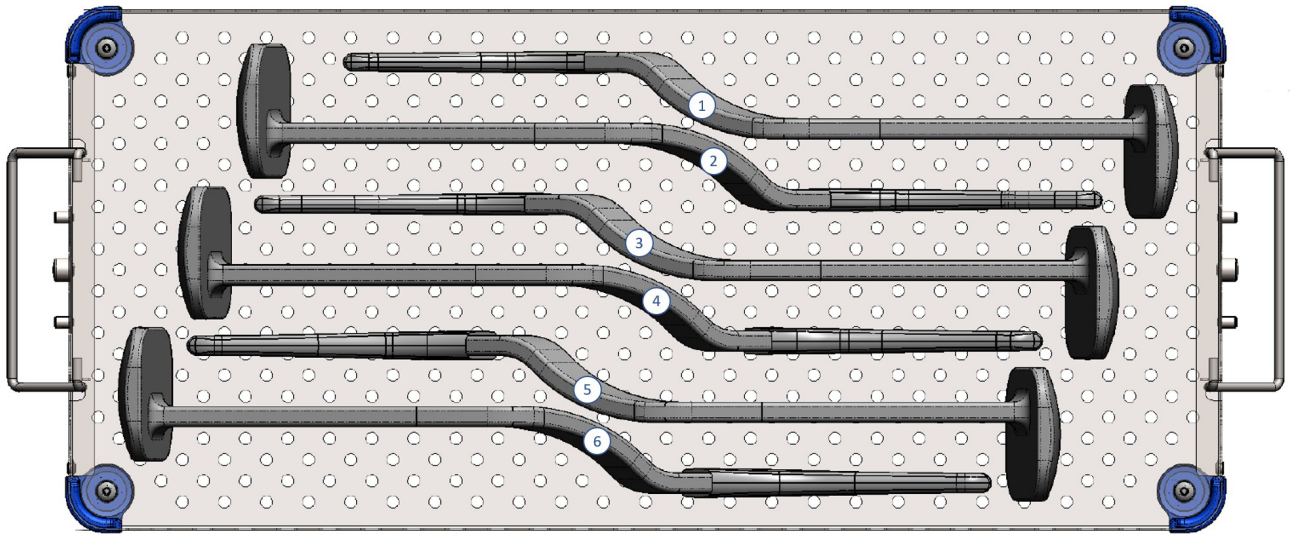
Item	Description	Reference	Qty
1	Trial INITIALE Revision femoral stem N° 202-200mm	2-0120220	1
1	Trial INITIALE Revision femoral stem N° 202-250mm	2-0120225	1
1	Trial INITIALE Revision femoral stem N° 302-200mm	2-0120320	1
1	Trial INITIALE Revision femoral stem N° 302-250mm	2-0120325	1
1	Trial INITIALE Revision femoral stem N° 302-300mm	2-0120330	1



Item	Description	Reference	Qty
2	Trial INITIALE Revision femoral stem N° 402-200mm	2-0120420	1
2	Trial INITIALE Revision femoral stem N° 402-250mm	2-0120425	1
2	Trial INITIALE Revision femoral stem N° 402-300mm	2-0120430	1
2	Trial INITIALE Revision femoral stem N° 402-350mm	2-0120435	1
2	Trial INITIALE Revision femoral stem N° 501-200mm	2-0120520	1
2	Trial INITIALE Revision femoral stem N° 501-250mm	2-0120525	1
2	Trial INITIALE Revision femoral stem N° 501-300mm	2-0120530	1
2	Trial INITIALE Revision femoral stem N° 501-350mm	2-0120535	1

# INSTRUMENTATION

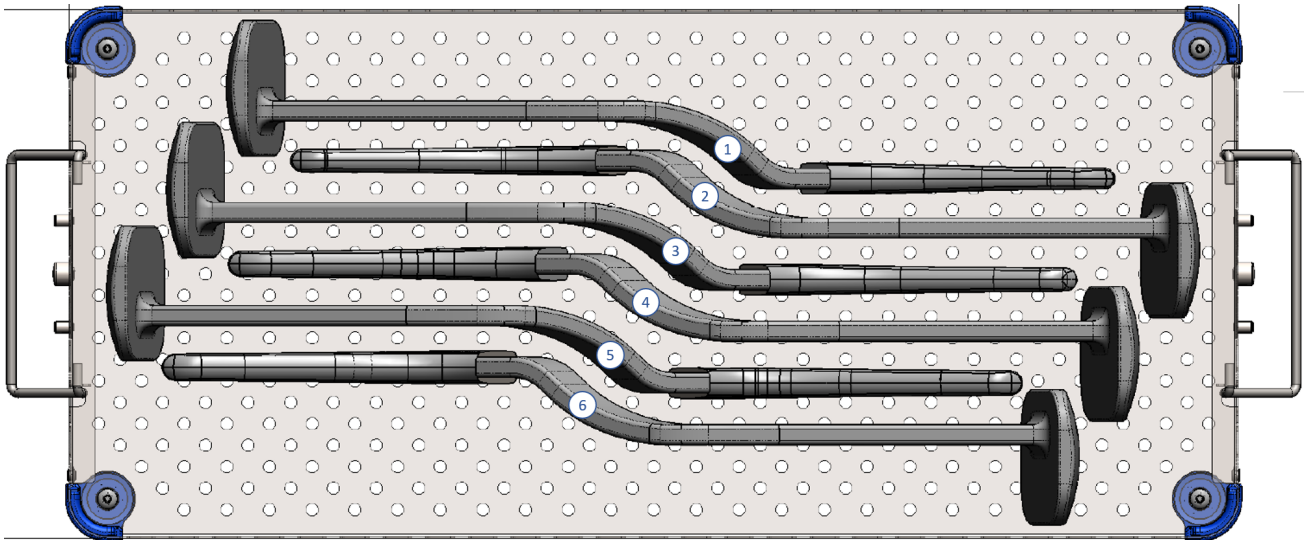
## DUAL OFFSET BROACHES TRAY - LEFT



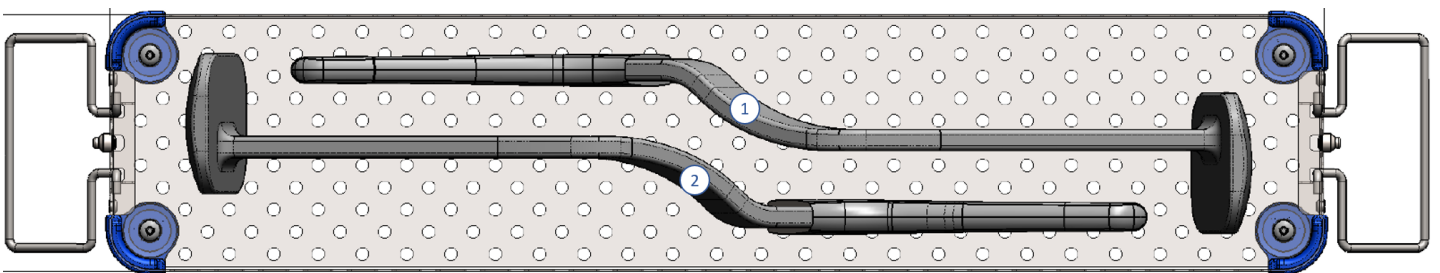
Item	Description	Reference	Qty
1	INITIALE Broach - Dual Offset - Left - Size 102S	2-1100112	1
2	INITIALE Broach - Dual Offset - Left - Size 201S	2-1100121	1
3	INITIALE Broach - Dual Offset - Left - Size 202S	2-1100122	1
4	INITIALE Broach - Dual Offset - Left - Size 203S	2-1100123	1
5	INITIALE Broach - Dual Offset - Left - Size 301S	2-1100131	1
6	INITIALE Broach - Dual Offset - Left - Size 302S	2-1100132	1

# INSTRUMENTATION

## DUAL OFFSET BROACHES TRAY - LEFT



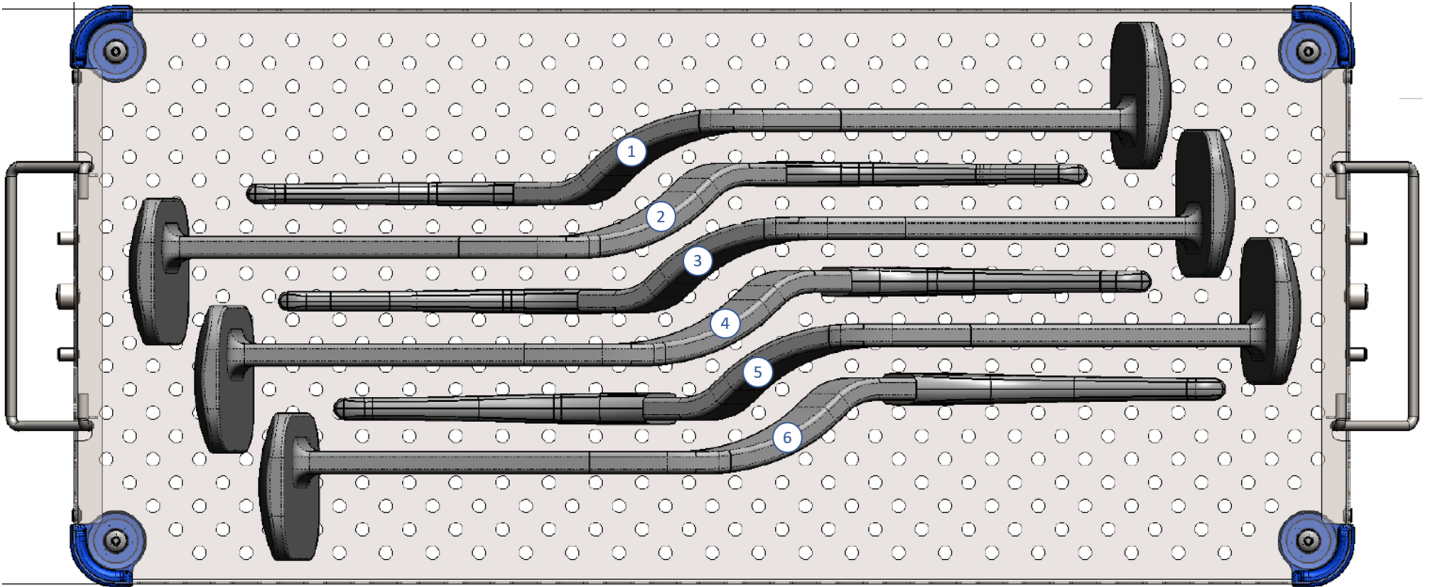
Item	Description	Reference	Qty
1	INITIALE Broach - Dual Offset - Left - Size 303S	2-1100133	1
2	INITIALE Broach - Dual Offset - Left - Size 401S	2-1100141	1
3	INITIALE Broach - Dual Offset - Left - Size 402S	2-1100142	1
4	INITIALE Broach - Dual Offset - Left - Size 403S	2-1100143	1
5	INITIALE Broach - Dual Offset - Left - Size 501S	2-1100151	1
6	INITIALE Broach - Dual Offset - Left - Size 502S	2-1100152	1



Item	Description	Reference	Qty
1	INITIALE Broach - Dual Offset - Left - Size 601S	2-1100161	1
2	INITIALE Broach - Dual Offset - Left - Size 602S	2-1100162	1

# INSTRUMENTATION

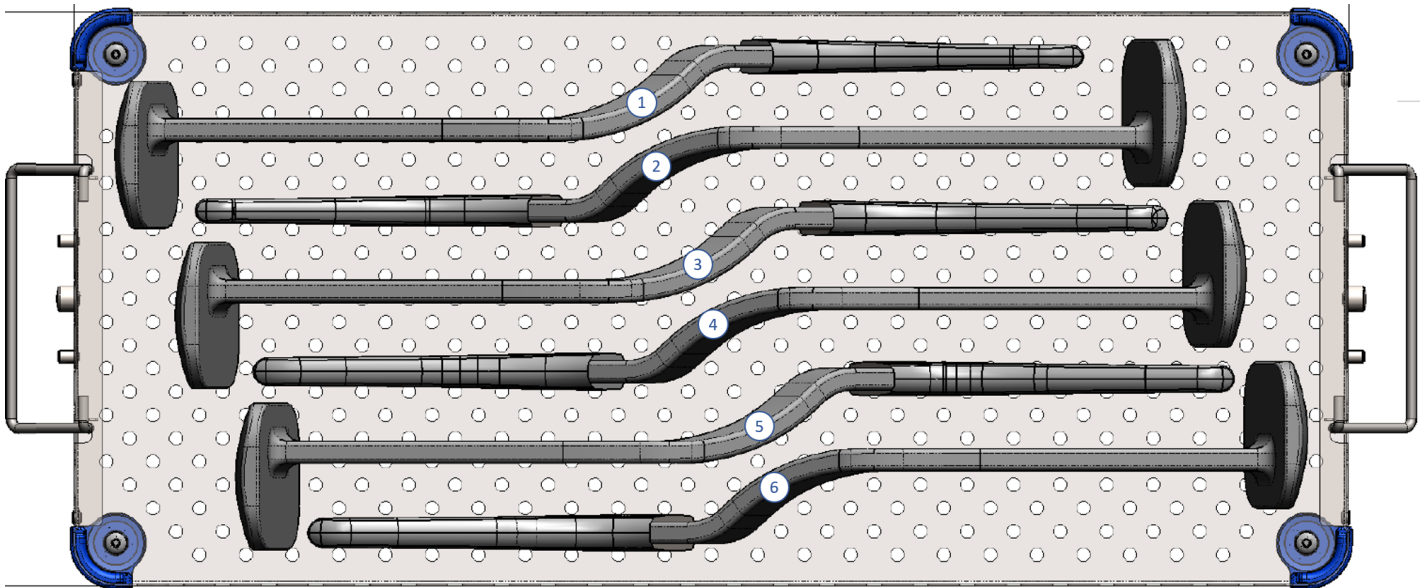
## DUAL OFFSET BROACHES TRAY - RIGHT



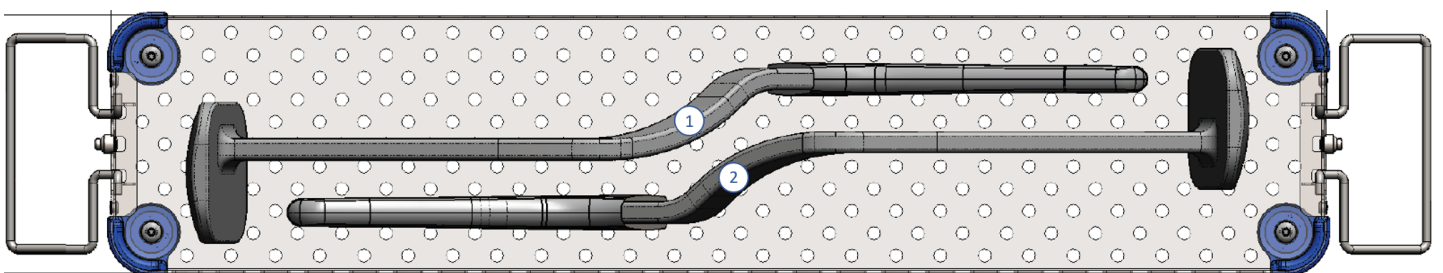
Item	Description	Reference	Qty
1	INITIALE Broach - Dual Offset - Right - Size 102S	2-1100212	1
2	INITIALE Broach - Dual Offset - Right - Size 201S	2-1100221	1
3	INITIALE Broach - Dual Offset - Right - Size 202S	2-1100222	1
4	INITIALE Broach - Dual Offset - Right - Size 203S	2-1100223	1
5	INITIALE Broach - Dual Offset - Right - Size 301S	2-1100231	1
6	INITIALE Broach - Dual Offset - Right - Size 302S	2-1100232	1

# INSTRUMENTATION

## DUAL OFFSET BROACHES TRAY - RIGHT



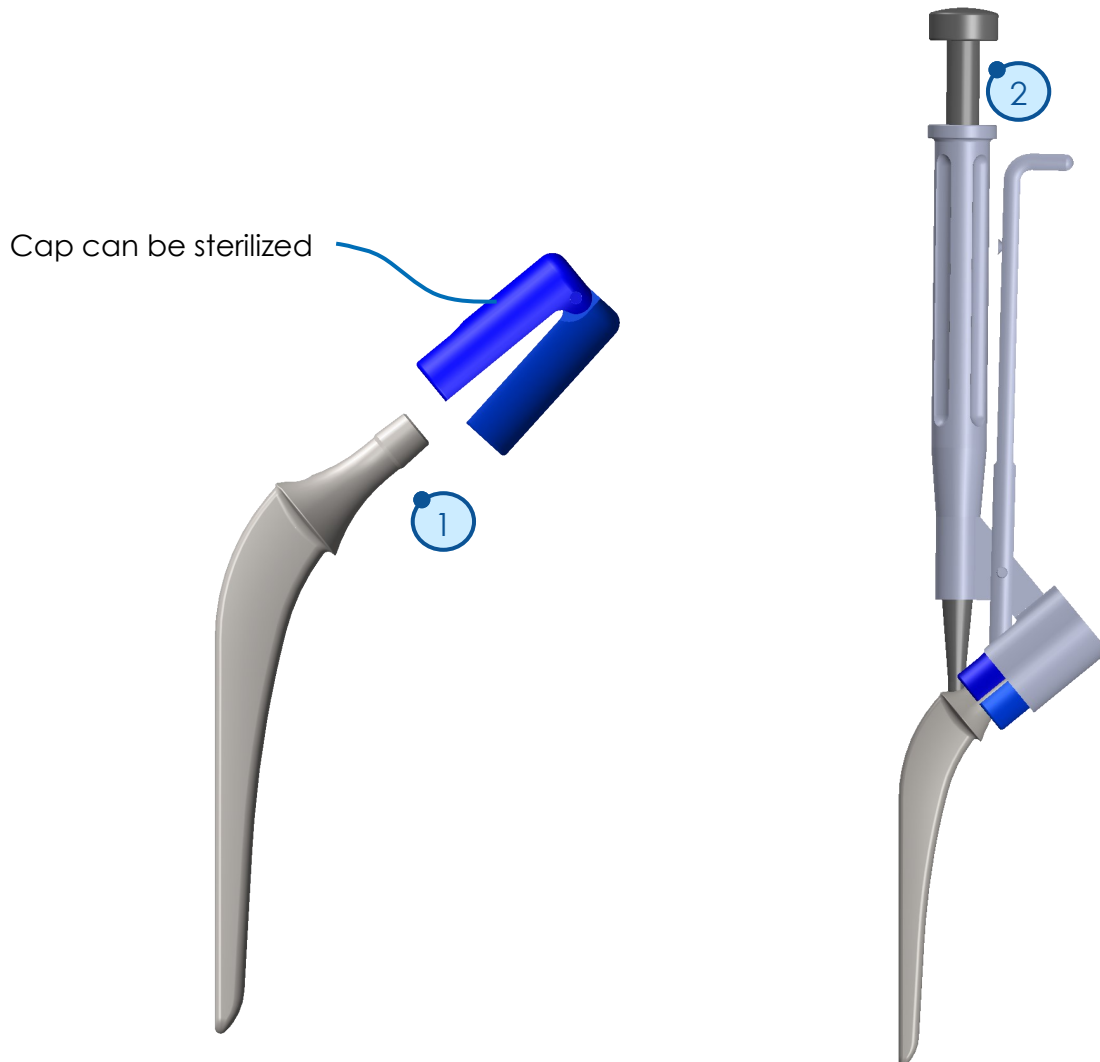
Item	Description	Reference	Qty
1	INITIALE Broach - Dual Offset - Right - Size 303S	2-1100233	1
2	INITIALE Broach - Dual Offset - Right - Size 401S	2-1100241	1
3	INITIALE Broach - Dual Offset - Right - Size 402S	2-1100242	1
4	INITIALE Broach - Dual Offset - Right - Size 403S	2-1100243	1
5	INITIALE Broach - Dual Offset - Right - Size 501S	2-1100251	1
6	INITIALE Broach - Dual Offset - Right - Size 502S	2-1100252	1



Item	Description	Reference	Qty
1	INITIALE Broach - Dual Offset - Right - Size 601S	2-1100261	1
2	INITIALE Broach - Dual Offset - Right - Size 602S	2-1100262	1

# INSTRUMENTATION

## OPTION : STEM HOLDER

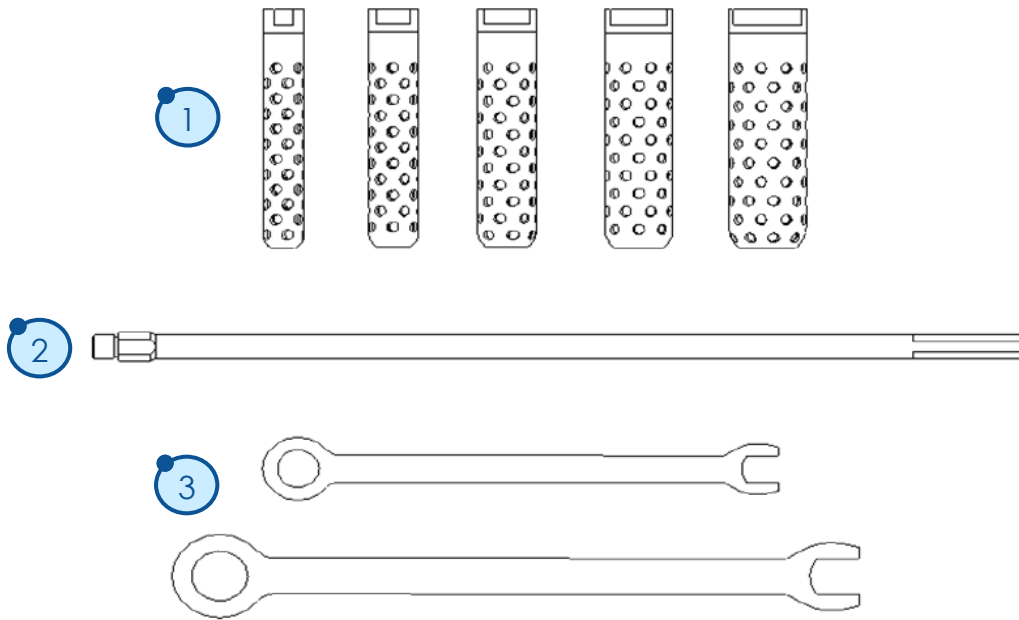


Prosthesis holder is available on request and is assembled to the cap. This holder is used to maintain the implant during polymerization to secure positioning.

Item	Description	Reference	Qty
1	INITIALE stem holder	2-0107100	1
2	Femoral stem impactor	2-0104800	1

# INSTRUMENTATION

## OPTION : CYLINDRICAL REAMERS



Item	Description	Reference	Qty
1	Cylindrical reamer $\varnothing 10$	2-0109110	1
1	Cylindrical reamer $\varnothing 12$	2-0109112	1
1	Cylindrical reamer $\varnothing 14$	2-0109114	1
1	Cylindrical reamer $\varnothing 16$	2-0109116	1
1	Cylindrical reamer $\varnothing 18$	2-0109118	1
2	Cylindrical reamer handle	2-0109000	1
3	Inox flat wrench 6 mm	K1254	1
3	Inox flat wrench 8 mm	K1255	1











*Products availability may vary depending on countries. Please check availability with your local representative.*



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