ACETABULAR RING

Acetabular Reinforcement Solution

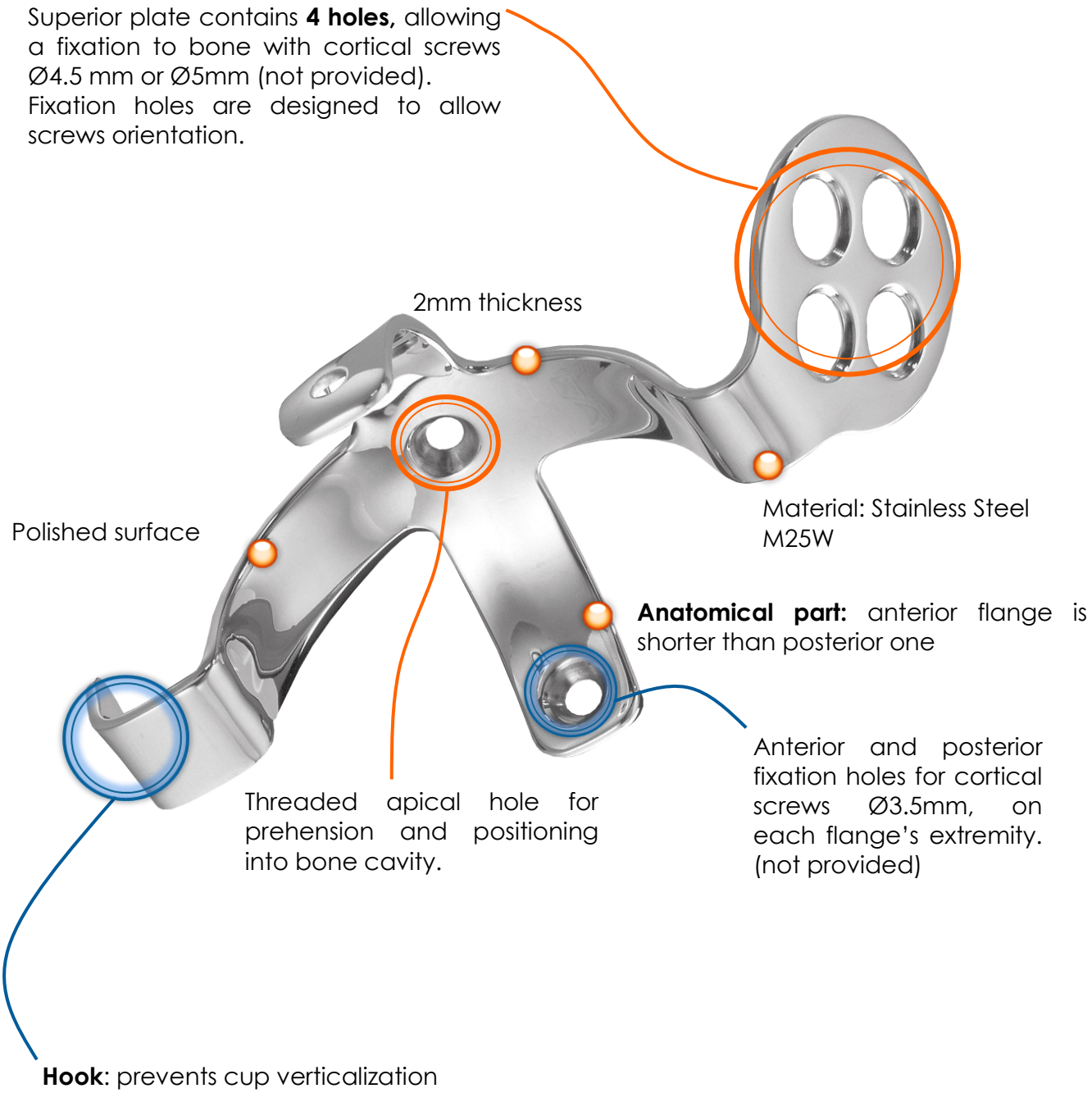
Surgical Technique

AMPLITUDE

ACETABULAR RING: RANGE

The acetabular cage is indicated in case of acetabular reconstruction, with bony defects.

It can be associated with either INITIALE® cup or with SATURNE® cemented cup.



Acetabular Ring

Acetabular ring description includes indications on compatibility with INITIALE® and SATURNE® cemented cups:

Acetabular Cage Right Side size xx / yy - Ø external zz mm

xx indicates the maximal diameter for INITIALE® cup in association with the acetabular cage (dome diameter).

yy indicates the maximal diameter for SATURNE® cemented cup in association with the acetabular. It also represents the diameter of the INITIALE® cup collar.

zz indicates the external diameter of the acetabular ring.

The associations between acetabular ring, INITIALE® cup or SATURNE® cemented cup are listed below:

Association between acetabular cage and SATURNE® cemented cup

Cup Size / Acetabular cage size	44	46	48	50	52	54	56	58	60
37/40 44 mm									
40/44 48 mm									
43/48 52 mm	■	■							
46/52 56 mm	■	■	■						
49/56 60 mm	■	■	■	■					
53/60 64 mm	■	■	■	■	■		■	■	

Association between acetabular cage and Initiale® cup

Cup Size (collar diameter) / Acetabular cage size	40	42	44	46	48	50	52	54	56	58	60
37/40 44 mm	■										
40/44 48 mm	■	■	■								
43/48 52 mm	■	■	■	■	■						
46/52 56 mm	■	■	■	■	■	■	■				
49/56 60 mm	■	■	■	■	■	■	■	■	■		
53/60 64 mm	■	■	■	■	■	■	■	■	■	■	■

Acetabular Ring

Acetabular Preparation

The acetabular ring can be implanted with any surgical approach. It can be implanted either before or after femoral preparation has been performed.

Expose acetabular cavity to retrieve any adherent cement debris (in case of cemented cup retrieval). Carefully clean bone cavity. It is recommended to ream softly the peripheral bone of the acetabulum, so as to preserve bone stock that is probably already weakened.

NOTE

The purpose of this surgical technique description is to provide instructions on how to use the instrumentation properly. The surgeon is fully responsible for choosing and performing the approach and surgical technique.

Acetabular Ring

Selection of Trial Acetabular Cage

Select the trial acetabular ring that better fits the anatomical acetabulum. Dimension of the acetabulum can help select the most appropriate size.

Place the trial acetabular ring inside the acetabulum: position the implant in the vertical plane, beginning with the hook on the apex of obturator foramen, then place the plate. Position the ring in the horizontal plane with the anterior and posterior flanges, trying to place the implant as close as possible to the bony wall. If necessary, remove any bone debris that could prevent from placing the implant properly, until the trial implant sits in the acetabulum . Check that the hook is in a strictly frontal plane.

In case of small or large defects of the superior wall, the trial acetabular ring should sit at distance from bone on its superior aspect. In this case it is recommended not to position it more vertical than 45°, and not to put the plate that includes 4 holes in contact with bone (this could lead to hook extraction), nor to bend the plate to adapt defects. It should serve as a reference to check and quantify bony defects, and the size and quantity of fragments that will be used for acetabular reconstruction. The bone should be adapted to the plate and not the opposite.

Once this is done, remove the trial acetabular ring.

Acetabular Ring

Acetabular Ring Positioning

Position the final acetabular ring on the prepared cavity, along with necessary and previously quantified bone graft. No space should exist with grafts between superior roof and the plate.

Check that the implant position is correct, apply manual pressure on the ring and fix it to iliac bone using cortical screws Ø4,5mm or Ø5mm. Begin with the hole that is closest to the hook, and screw up and back in sacro-iliac direction (it must not reach it). Before tightening it firmly, screw another one in the anterior hole and tighten it to stabilize the implant.
Tighten firmly the two screws while keeping manual pressure on the implant. It is recommended to go through the grafts with the screws, until the tightening push it against bone.

Screws placement will put stress on the acetabular ring. If the hook tends to get out from its place, the superior graft height is probably not thick enough. In this case it is recommended to add a graft or put a thicker one on the superior aspect, under the plate. Screw again until the implant seats properly into bone cavity.

Remodel lateral wall of the acetabulum thanks to bone graft that will fill the gaps between the flanges and bone cavity. If necessary, it is possible to fix them onto acetabular ring thanks to Ø3,5mm screws in dedicated holes on each flange.

Morcellized cancellous bone should then be packed it between interstices on pubis, ischium and between grafts.

Acetabular Ring

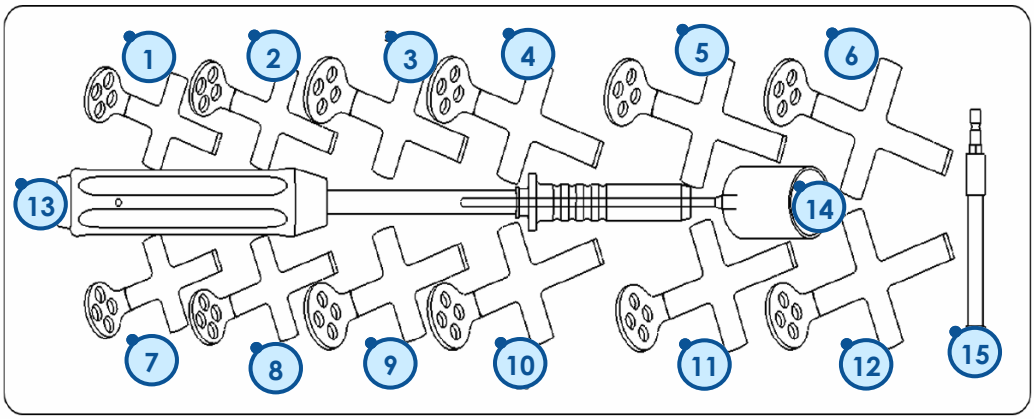
Cup Placement

Clean bone cavity remodelled with acetabular ring, and check the proper fixation of grafts.

Position the trial cup of proper size (for size selection, please refer to table on page 4). Refer to the dedicated surgical technique of cup to implant it (INITIALE® cup or SATURNE® cemented cup).

INSTRUMENTATION

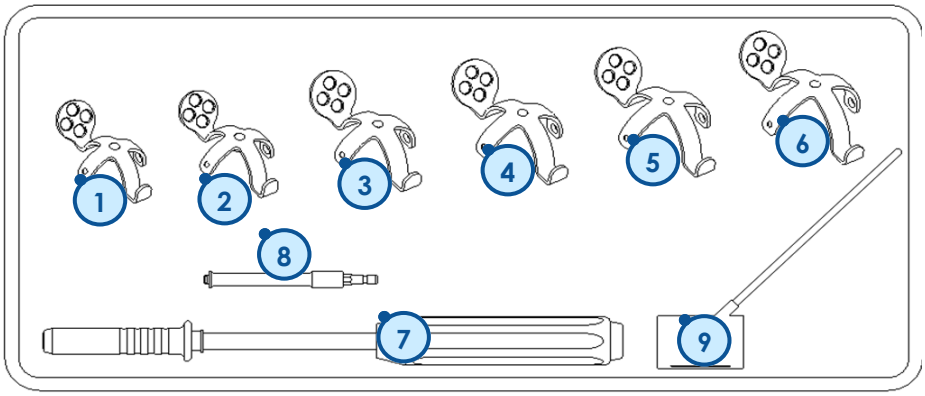
Acetabular Ring Left and Right Sides 2-0199916



Rep	Description	Reference	Qty
1	Trial acetabular reconstruction ring - Right S 37/**40** D.EXT 44	2-0107**40**	1
2	Trial acetabular reconstruction ring - Right S 40/**44** D. EXT 48	2-0107**44**	1
3	Trial acetabular reconstruction ring - Right S 43/**48** D. EXT 52	2-0107**48**	1
4	Trial acetabular reconstruction ring - Right S 46/**52** D. EXT 56	2-0107**52**	1
5	Trial acetabular reconstruction ring - Right S 49/**56** D. EXT 60	2-0107**56**	1
6	Trial acetabular reconstruction ring - Right S 53/**60** D. EXT 64	2-0107**60**	1
7	Trial acetabular reconstruction ring - Left S 37/**40** D. EXT 44	2-0107**40**	1
8	Trial acetabular reconstruction ring - Left S 40/**44** D. EXT 48	2-0107**44**	1
9	Trial acetabular reconstruction ring - Left S 43/**48** D. EXT 52	2-0107**48**	1
10	Trial acetabular reconstruction ring - Left S 46/**52** D. EXT 56	2-0107**52**	1
11	Trial acetabular reconstruction ring - Left S 49/**56** D. EXT 60	2-0107**56**	1
12	Trial acetabular reconstruction ring - Left S 53/**60** D. EXT 64	2-0107**60**	1
13	Universal Handle	2-0101000	1
14	Acetabular Reconstruction Ring Handle	2-0108800	1
15	Cup Alignment Guide	2-0102000	1

INSTRUMENTATION

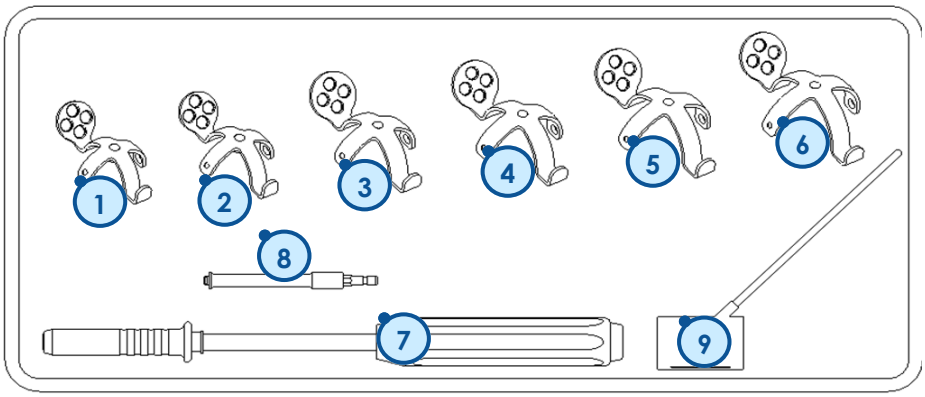
Acetabular Ring Left Side 2-0199920



Rep	Description	Reference	Qty
1	Trial acetabular reconstruction ring - Left S 37/**40** D. EXT 44	2-0107**40**	1
2	Trial acetabular reconstruction ring - Left S 40/**44** D. EXT 48	2-0107**44**	1
3	Trial acetabular reconstruction ring - Left S 43/**48** D. EXT 52	2-0107**48**	1
4	Trial acetabular reconstruction ring - Left S 46/**52** D. EXT 56	2-0107**52**	1
5	Trial acetabular reconstruction ring - Left S 49/**56** D. EXT 60	2-0107**56**	1
6	Trial acetabular reconstruction ring - Left S 53/**60** D. EXT 64	2-0107**60**	1
7	Universal Handle	2-0101000	1
8	Acetabular Reconstruction Ring Handle	2-0108800	1
9	Cup Alignment Guide	2-0102000	1

INSTRUMENTATION

Acetabular Ring Right Side 2-0199921



Rep	Description	Reference	Qty
1	Trial acetabular reconstruction ring - Right S 37/**40** D.EXT 44	2-0107**40**	1
2	Trial acetabular reconstruction ring - Right S 40/**44** D. EXT 48	2-0107**44**	1
3	Trial acetabular reconstruction ring - Right S 43/**48** D. EXT 52	2-0107**48**	1
4	Trial acetabular reconstruction ring - Right S 46/**52** D. EXT 56	2-0107**52**	1
5	Trial acetabular reconstruction ring - Right S 49/**56** D. EXT 60	2-0107**56**	1
6	Trial acetabular reconstruction ring - Right S 53/**60** D. EXT 64	2-0107**60**	1
7	Universal Handle	2-0101000	1
8	Acetabular Reconstruction Ring Handle	2-0108800	1
9	Cup Alignment Guide	2-0102000	1

Notes

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