

— ACETABULAR CROSS SYSTEM

MARC.K™



SURGICAL TECHNIQUE



groupe lépine

Depuis 1714

SUMMARY

MARC.KTM CROSS

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INTRODUCTION



The goal of this acetabular reconstruction is to restaure a bony cavity which is in normal size, in a correct anatomical position and with mechanical properties close to those of a normal acetabulum.

The stainless steel Marc.K™ cross plate allows for acetabular reconstruction by reinforcing the graft during its partial or total osteointegration.

It is associated with the placement of a cemented cup.

Its plate and perforated branches allow the insertion of 5 mm screws.

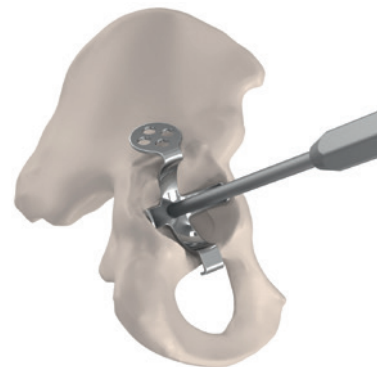
SURGICAL TECHNIQUE

Exposure, socket removal & cleaning of the acetabular cavity

- The acetabular cavity must be widely exposed. The removal of a loose socket is not usually difficult but however one must excise all the scar tissue around the entire acetabular orifice in order to identify the periphery of the implant and the bony rim, before component extraction. If the socket is still fixed, the safest means of removing the acetabular component is to disrupt the cement (or cementless coating) interface.

Grafting & trials

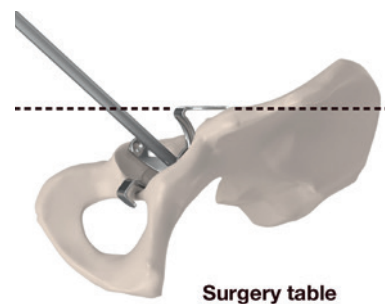
- Screw the Marc.K™ acetabular cross holder «HKA PA001» onto Marc.K™ trial cross «SA02010xx».
- Place the cross into the acetabular cavity to assess amount of bone loss: locate the obturator hole and place the hook into it. The flange of the trial cross should be horizontal relative to the surgery table.



IMPORTANT

When placing the trial cross, choose the size that provides the best surface coverage for the patient. Marc.K™ acetabular cross devices are available in 6 sizes left and right.

- Once extent of bone loss and size of acetabular cross plate have been determined, carefully remove the trial cross while making sure not to damage the edge of the obturator hole.
- The areas lacking bone will be filled with bone graft material (TBF type), if necessary, in the quadrilateral plate.

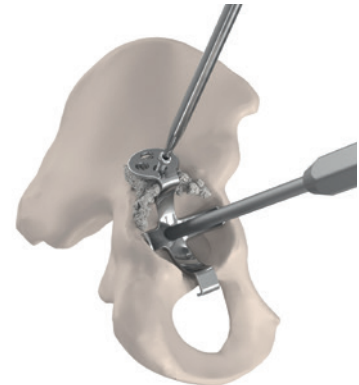
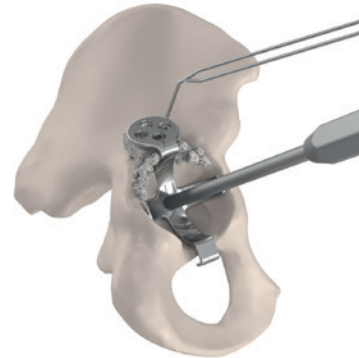
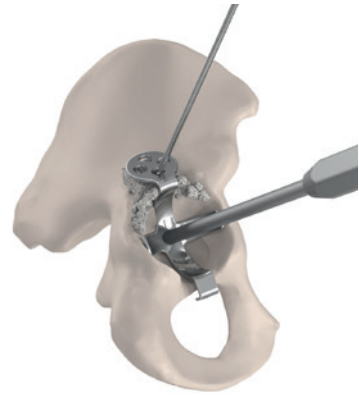


Fixation of the final acetabular cross

- Screw the Marc.K™ acetabular cross holder «HKA PA001» at the bottom of Marc.K™ acetabular cross (implant).
- Place the implant hook into the obturator hole. The flange of the Marc.K™ acetabular cross should be horizontal relative to the surgery table.
- Screw fixation of the Marc.K™ acetabular cross:
 - Starting at inner flange proximal hole.
 - Use 3.2 mm drill «GUA FX050» to prepare the inner flange hole.

IMPORTANT

Make sure not to bend the Marc.K™ acetabular cross (implant).



- Use depth gauge «HL3010-200-07» to determine required screw length.
- Use T handle screwdriver «SA0360007» to implant corresponding screw.».
- Once the acetabular cross has been stabilized, add bone graft material, if necessary, to completely fill any bone voids, including under the cross.
- Set screws into the three other holes to permanently fix the Marc.K™ acetabular cross.
- Make sure acetabular cross is stable before unscrewing handle, than verify that all screws.

Fixation of the cemented cup

- Prepare cement according to the manufacturer's recommendations.
- Manually introduce standard viscosity cement in the middle of the acetabular cross.
- Then position the final cup, and keep it immobilized during polymerization.



Removal

In case of revision, the screws can be unscrewed from the pelvis thanks to the provided screwdriver. The cemented implants and the surrounding cement can be removed with standard instrumentation available in the operating room.

MARC.K™ CROSS SYSTEM

ACETABULAR COMPONENTS



Marc.K™ cross plate
right & left

Acetabular cross plate machined in stainless steel.

It presents:

- a perforated plate compatible with 5 mm screws,
- an open shape which induces an elasticity comparable to that of the acetabular cavity,
- two asymmetrical branches which reproduce a natural anteversion,
- an obturator hook,
- a thread compatible with the delivered hold.

It is sterilized by Gamma radiation.

DESIGNATION	REF
MARC.K CROSS RIGHT S4	SI0200964
MARC.K CROSS RIGHT S5	SI0200965
MARC.K CROSS RIGHT S6	SI0200966
MARC.K CROSS LEFT S4	SI0200974
MARC.K CROSS LEFT S5	SI0200975
MARC.K CROSS LEFT S6	SI0200976



Cortical screw Ø 5mm

Cortical screw machined in stainless steel.

It presents:

- hemispherical head,
- 3.5 mm hexagonal head,

It is sterilized by Gamma radiation.

DESIGNATION	length	REF
CORTICAL SCREW L20	20 mm	SI0351320*
CORTICAL SCREW L25	25 mm	SI0351325*
CORTICAL SCREW L30	30 mm	SI0351330
CORTICAL SCREW L35	35 mm	SI0351335*
CORTICAL SCREW L40	40 mm	SI0351340
CORTICAL SCREW 45	45 mm	SI0351345*
CORTICAL SCREW L50	50 mm	SI0351350
CORTICAL SCREW L55	55 mm	SI0351355*
CORTICAL SCREW L60	60 mm	SI0351360
CORTICAL SCREW L65	65 mm	SI0351365*
CORTICAL SCREW L70	70 mm	SI0351370*
CORTICAL SCREW L75	75 mm	SI0351375*

*These items are only available on special request.

Correspondence table Marc.K cross plate vs. cemented cups

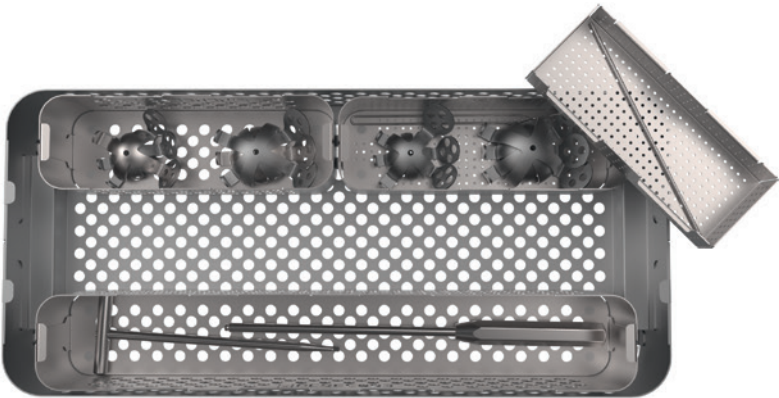
CROSS PLATE (thickness 2 mm)		Constrained cemented cup		QUATTRO™ cemented cup		QUATTRO™ PnP cemented cup	
Size	Reference	Maximal size	Reference	Maximal size	Reference	Maximal size	Reference
S4	SI0200964 SI0200974	S46	HL3003-122-46	S44	HQCCC044	S44	HQCCC144
S5	SI0200965 SI0200975	S48	HL3003-128-48	S48	HQCCC048	S48	HQCCC148
S6	SI0200966 SI0200976	S54	HL3003-128-54	S52	HQCCC052	S52	HQCCC152

This «Marc.K™ cross plate / cemented cups» combination allows a minimum cement thickness of 1 mm.

INSTRUMENTATION

TO STERILIZE

Marc.K™ cross plate instrumentation tray	
DESIGNATION	REF
MARC.K TRIAL CROSS RIGHT S4	SA0201064
MARC.K TRIAL CROSS RIGHT S5	SA0201065
MARC.K TRIAL CROSS RIGHT S6	SA0201066
MARC.K TRIAL CROSS LEFT S4	SA0201074
MARC.K TRIAL CROSS LEFT S5	SA0201075
MARC.K TRIAL CROSS LEFT S6	SA0201076
MARC.K ACETABULAR CROSS HOLDER	HKA PA001
CROSS HOLDER	SA0201080
T HANDLE SCREWDRIVER HEX 3.5	SA0360007
HEXAGONAL SCREWDRIVER 3.5 L350	HL3010-100-25
DEPTH GAUGE	HL3010-200-07
DRILL Ø3.2 L200	GUA FX050



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Depuis 1714