LINK®

MobileLink®
Acetabular Cup System

Surgical Technique

Presented by:

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MobileLink®
Acetabular Cup System

Preoperative Planning

It is important to plan the intervention preoperatively in order to select the correct implant type and size and it's final intraosseous position based on the patients individual anatomy. The surgeon should perform a careful evaluation of the patient´s clinical condition and consider the level of physical activity before performing a hip replacement.

For optimal results, the surgery should be planned in advance using the appropriate templates.
The magnification factor of the X-rays must be compatible with the factor on the templates.
MobileLink® X-ray templates are available in standard 1.1:1.

The implant size must be chosen from adequate AP and ML X-rays with sufficient legibility. Each X-ray should be large enough for application of the whole template. A second X-ray of the unaffected joint is often helpful. Inadequate pre-operative planning can lead to improper selection of the implants and/or incorrect implant positioning.

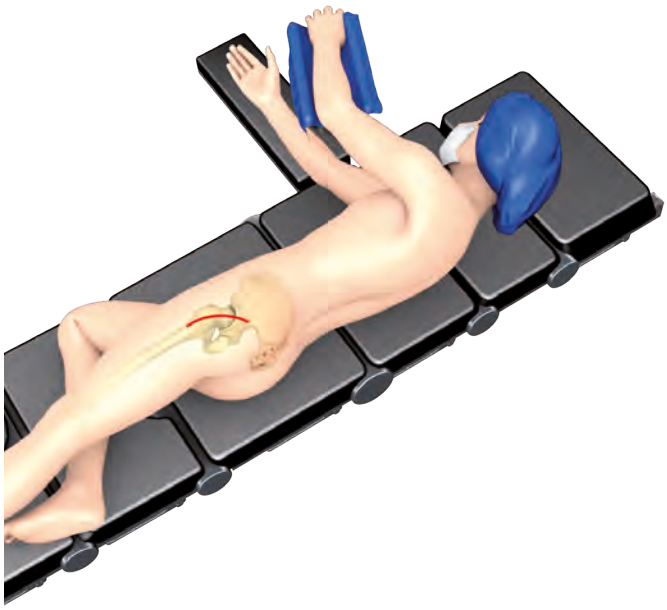
Note: Pre-operative planning provides an initial estimation of the final situation but cannot conclusively determine the most adequate size to be used. The ultimate decision can only be taken intraoperatively.

In principle, a load-bearing, stable acetabular fossa and solid lateral osseous coverage is desirable.
To achieve a press-fit with primary stability, the osseous circumference of the acetabulum must be well preserved.

The **inclination** of the acetabular component should not be significantly above or below 45°.
The **anteversion** should not be significantly above or below 15°.

Placement outside of these boundaries will result in reduced range of motion and could subsequently lead to subluxation and/or dislocation of the joint.

MobileLink® Acetabular Cup System



The MobileLink® Acetabular Cup System can be implanted using any of the standard approaches for total hip replacement depending on the surgeon's experience.

Acetabular Reaming

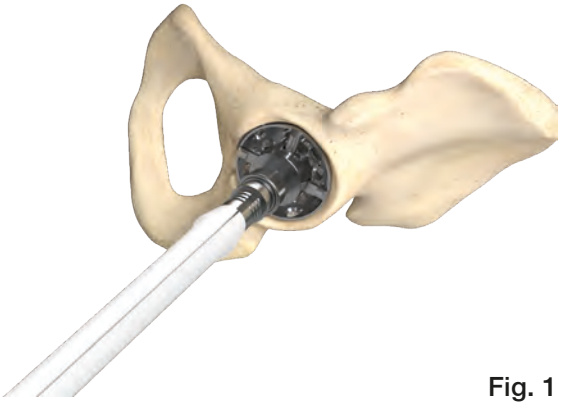


Fig. 1

Depending on the approach used, the leg is positioned such that the acetabulum is well exposed.

The initial reamer size corresponds to the width of the acetabular cup entrance. In normal anatomy the reamer is inserted into the acetabulum at approximately 45 degrees inclination and 15 degrees anteversion (Fig. 1).

Consecutively reamers with increasing diameters are applied until areas of bloody subchondral compacta become visible but without compromising the supportive structure for secure anchoring of the Shell. It is essential to keep the reamer head absolutely steady.

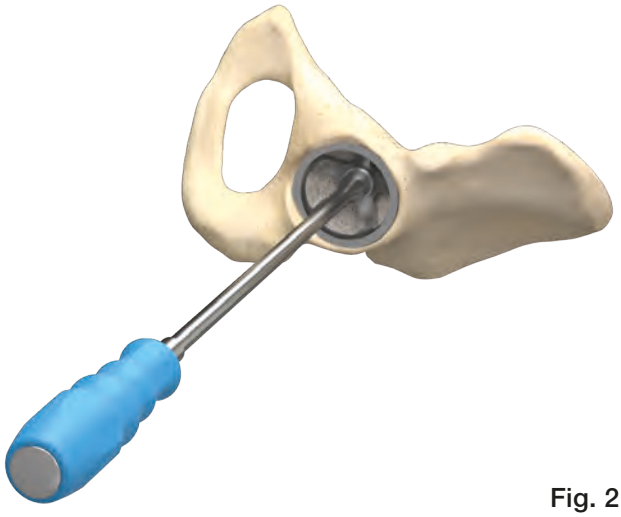


Fig. 2

Determination of Shell Size

Following preparation of the acetabulum, the Trial Cup is attached to the Universal Handle and is inserted into the acetabulum.

The Trial Cup is used to determine the size of the shell as the reamed cavity may be larger than originally intended. As soon as the trial is firmly seated in the reamed acetabulum the corresponding size of the shell is to be selected (Fig. 2).

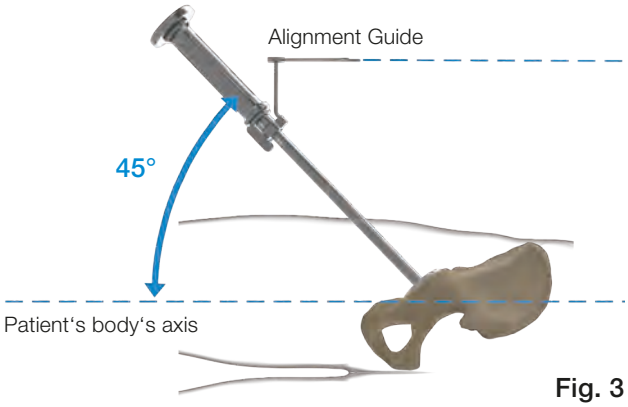


Fig. 3

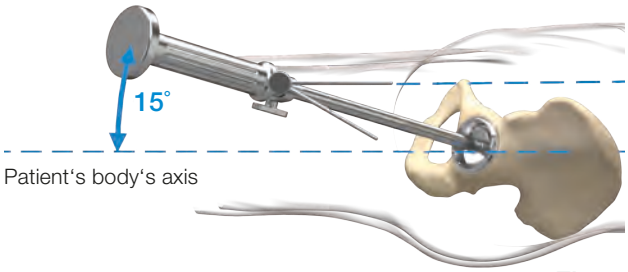


Fig. 4

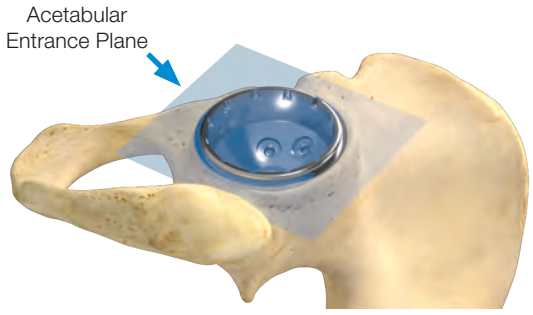


Fig. 5

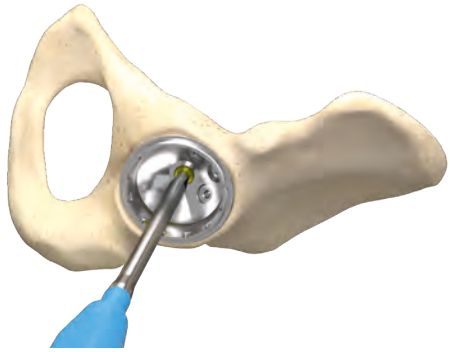


Fig. 6

Implantation of the Shell

Connect the Shell to the Impactor Handle.
Attach the Alignment Guide.

In case the Offset Cup Impactor is used, see page 14 for a detailed description.

The Shell is aligned for 45° inclination using the corresponding Alignment Guide which is attached to the Impactor Handle. The Alignment Guide should be 90° to the body's axis. To achieve 15° anteversion the Impactor Handle is oriented such that the Alignment Rod is in parallel to the patient's body (Fig. 3-4).

The MobileLink® Shells have a polar flattening of ~1 mm and have a built-in peripheral press-fit. The TiCaP® Shells are designed with 1.6 mm press-fit. A TiCaP® Shell labelled with Shell size 52 mm for example has an actual size of 53.6 mm. The intra-operative press-fit depends on the last used reamer.
Note: Appropriate reaming should be based upon the patient's bone quality and determined by the surgeon intraoperatively.

The Shell is then driven with appropriate taps on the Impactor Handle into the prepared acetabulum. The rim of the Shell should be parallel to the acetabulum entrance plane for secure seating in the surrounding bone (Fig. 5).
Note: If it is noticed that the Shell is not fully seated, the optional Final Shell Impactor assembled with the Universal Handle may then be used instead of the Impactor Handle to assist in impacting the Shell in the dome area until it is completely seated in the prepared acetabulum.

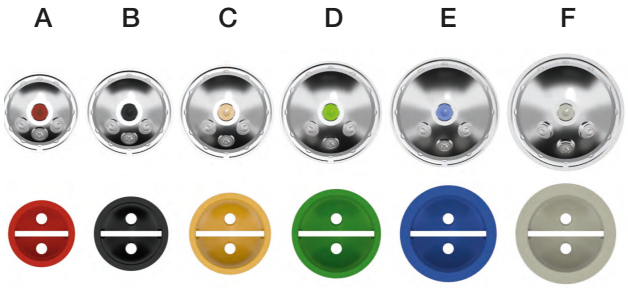
After impaction the polar hole is closed with the Polar Screw (only for Cluster hole Shell) (Fig. 6).
Caution: The head of the Polar Screw should not protrude from the internal surface of the Shell, otherwise the Insert or Shell/Insert Adapter cannot be seated correctly.

Optional: Additional screw fixation (see page 08)

Optional: Shell/Insert Adapter (see page 09)

Shell size	Insert size
42/44 mm	A
46/48 mm	B
50/52 mm	C
54/56 mm	D
58/60 mm	E
62/64/66/68/70/72 mm	F
74/76/78/80 mm	G

Table 1



Cluster Hole Shells and Trial Inserts

Optional: Trial Reduction with Trial Insert

The Trial Insert is chosen according to the Insert size, supported by a color coding, shown in Table 1.

The Trial Insert is placed in the Shell (Fig. 7).

In case components are used to correct inclination and/or offset, a Trial Insert is assembled with the corresponding Trial/Shell Insert Adapter.
This assembly is placed in the Shell.

Note: Implant identification must be made using laser marked information. Color coding is used only as a secondary reference. There may be slight variations in colors between components.

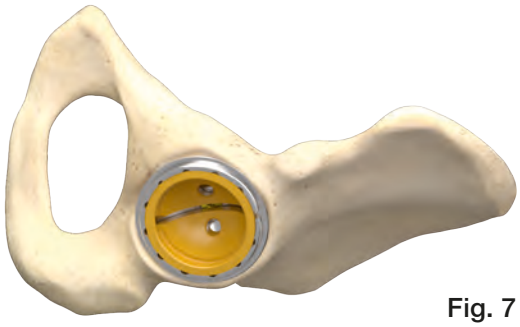


Fig. 7

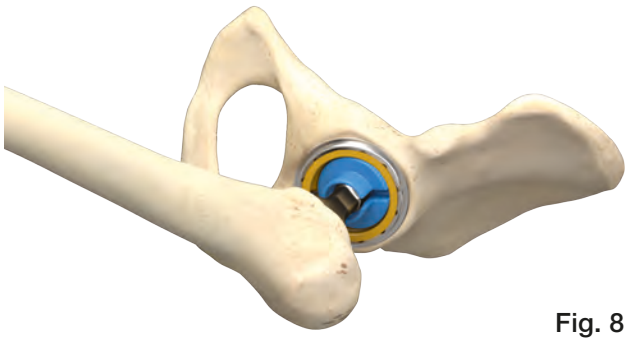


Fig. 8

The reduction of the joint is perfomed with a Trial Head on the Femoral Rasp and Trial Neck.

After reduction of the joint, the leg length, joint stability and range of motion is checked (Fig. 8).

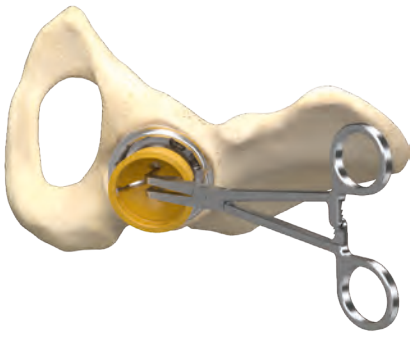


Fig. 9

The Trial Insert can be removed with the Forceps out of the Shell (Fig. 9).

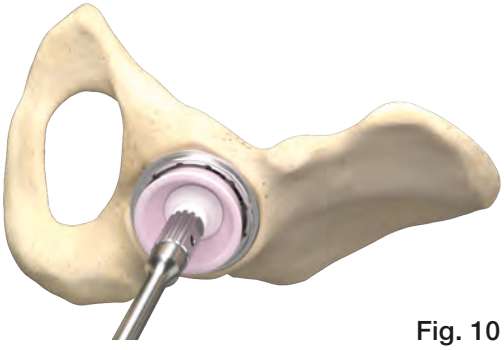


Fig. 10

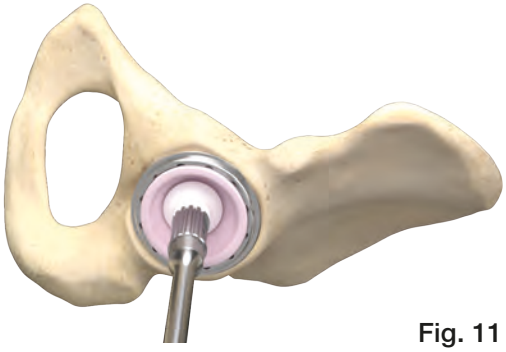


Fig. 11

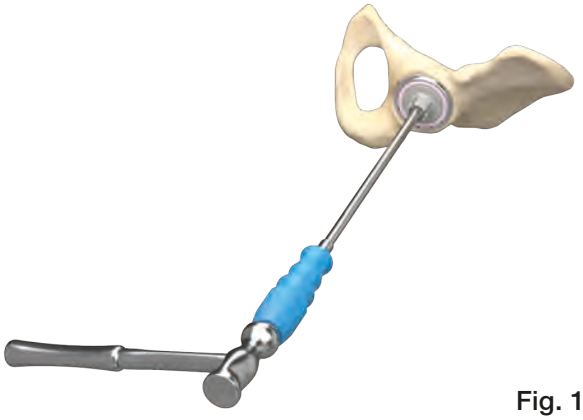


Fig. 12

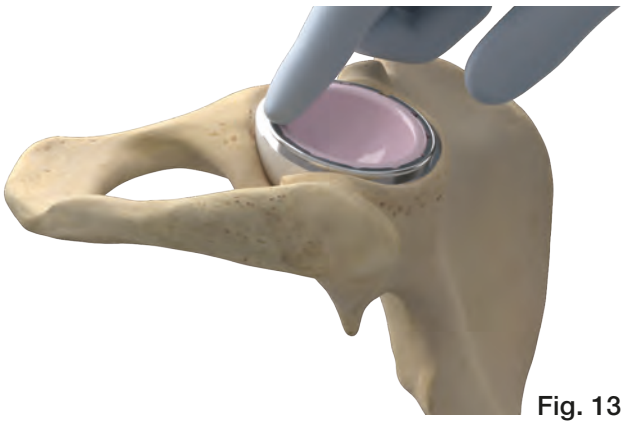


Fig. 13

Implantation of the Ceramic Insert

Caution: Do not repeatedly force the Ceramic Insert into place and do not use a Ceramic Insert in a Shell which prior has held a Ceramic Insert. In this case a UHMWPE Insert or a (Neutral) Shell/ Insert Adapter must be used.

Before the introduction of the Insert, the inside of the Shell is carefully cleaned and checked that surrounding soft tissues do not interfere with the introduction of the Insert.

For insertion the Insert Positioner can be used (Fig. 10).
Mount the Suction Pad on the Insert Positioner. Connect the the Insert Positioner with the Universal Handle and mount the Ceramic Insert on the Suction Pad.
Place the Ceramic Insert in the Shell and push the Universal Handle gently into the Shell. Subsequently, the Insert is released from the Suction Pad by pulling the Universal Handle away from the Shell (Fig. 11).

Caution: Do not hit on the Insert Positioner to fix the Insert in the Shell.

Assemble the Driver Head corresponding to the head size on the Universal Handle. Fix the Ceramic Insert with a light tap on the Driver Head assembly (Fig. 12).

Check the correct positioning of the Insert manually with circular motion at the Cup entrance. The rim of the Insert must not protrude at the entrance of the Shell (Fig. 13).

Caution: Only BIOLOX® delta* XLWZero listed in this catalog are compatible. There is a high risk of ceramic insert fracture if other ceramic inserts are used.

* BIOLOX® delta is made by
CeramTec GmbH, Plochingen, Germany

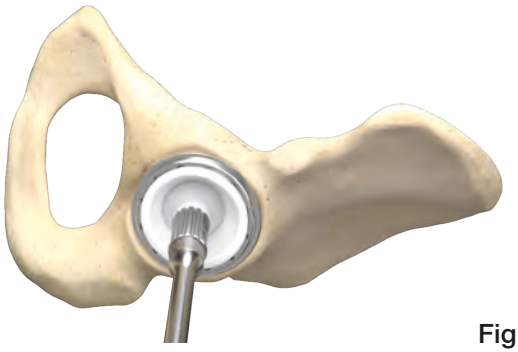


Fig. 14

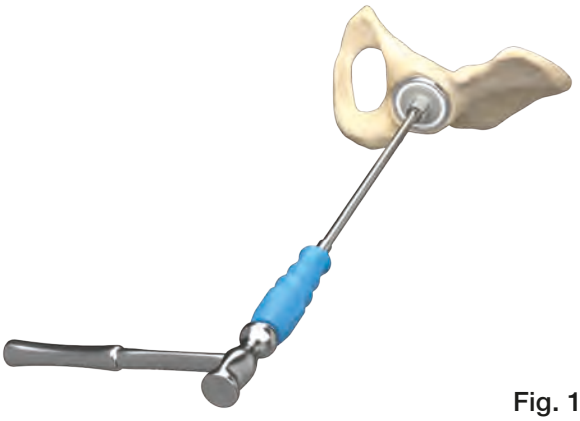


Fig. 15

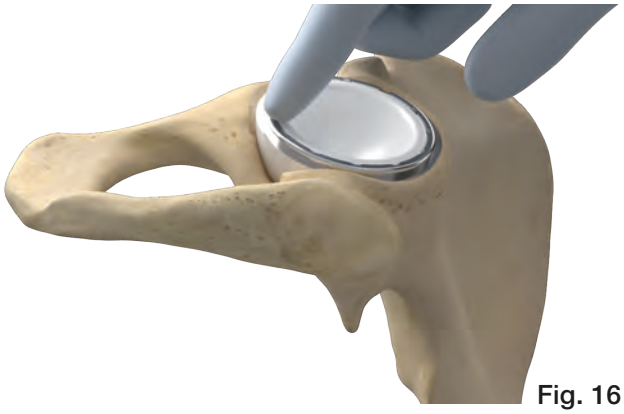


Fig. 16

Implantation of the UHMWPE Insert

Before the introduction of the Insert, the inside of the Shell is carefully cleaned and checked that surrounding soft tissues do not interfere with the introduction of the Insert.

UHMWPE Inserts can be introduced without the use of a Positioning Instrument. When introducing, the Insert is held between the thumb and index fingers.

The Insert is pressed into the Shell using the index finger, at which the pegs have to be correctly aligned with the recessed areas at the Shell.

Then the correct positioning of the Insert in the Shell is controlled.

The UHMWPE Inserts can also be positioned with the Insert Positioner as described in the prior section (Fig. 14).

To achieve a stable connection between the Insert and the Shell, the Insert is fixed in the same way as the Ceramic Insert described in the prior section (Fig. 15).

Check the correct positioning of the Insert manually with circular motion at the Cup entrance (Fig. 16).

Caution: Range of motion is decreased for non-neutral UHMWPE Inserts

Note: Neutral UHMWPE Inserts should be the preferred choice of insert.

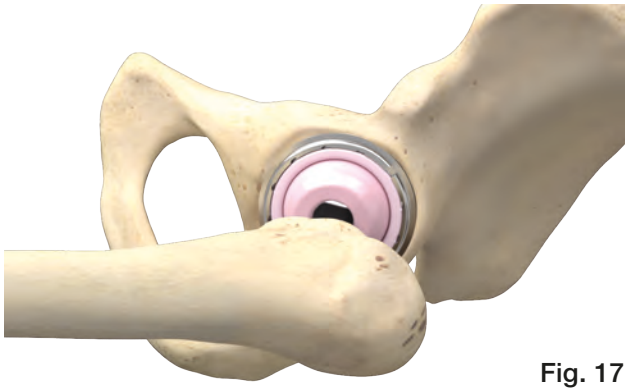


Fig. 17

Final Reduction

With the final acetabular components in place, continue with the implantation of the femoral components.

Once all final implants are placed, perform the final reduction of the hip and check for joint stability and range of motion (Fig. 17).

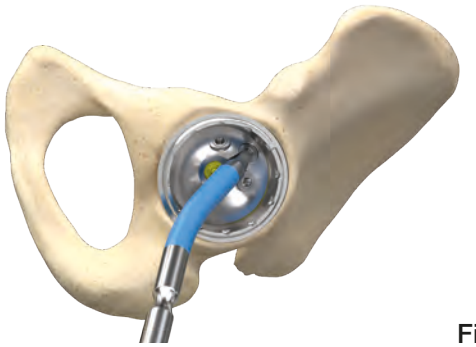


Fig. 18

Optional: Additional Screw Fixation

The Shell may additionally be fixed with Bone Screws. For that purpose the required number of Closing Screws have to be removed from the Cluster hole Shell (Fig. 18). The Multi hole Shell are not delivered with Closing Screws.

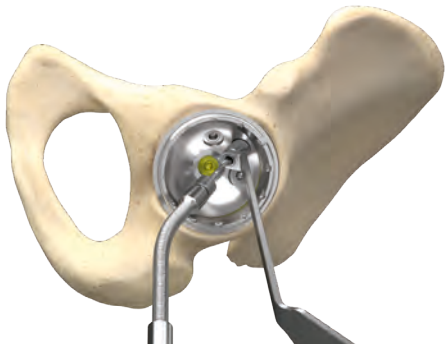


Fig. 19

A hole is drilled into the bone with the help of the Drill Guide, which is inserted into the hole in the desired direction with a maximum angulation of approximately +/-15° (Fig. 19).

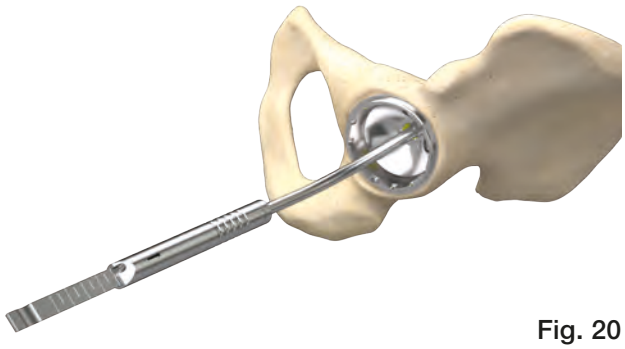


Fig. 20

Use the Curved Depth Gauge to identify the correct length of the Bone Screw (Fig. 20).

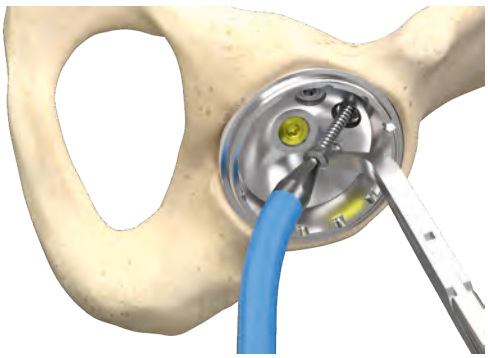


Fig. 21

To insert the Bone Screw the Flexible or Rigid Screwdriver may be used (Fig. 21).

Caution: The head of the Bone Screw should not protrude from the internal surface of the Shell, otherwise the Insert or Shell/Insert Adapter cannot be seated correctly.

Caution: Only Bone Screws listed in this catalog are compatible.

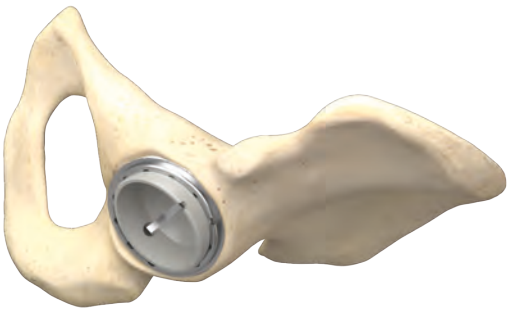


Fig. 22

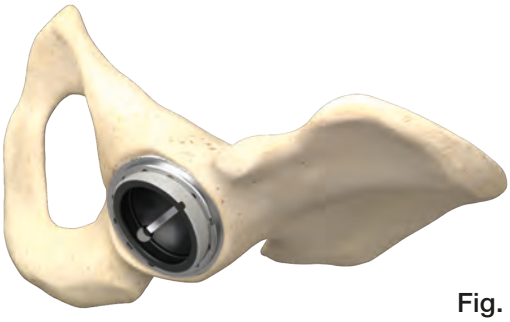


Fig. 23

Optional: Shell/Insert Adapter

Different types of Shell/Insert Adapters can be used to restore the center of rotation and anteversion angle.

Trial Adapters

To choose the right type of Shell/Insert Adapter, the corresponding Trial Shell/Insert Adapter is placed in the Shell (Fig. 22). Consecutively a Trial Insert is chosen according to the Insert size shown in the table on page 19. The Trial Insert is placed in the Trial Shell/Insert Adapter (Fig.23).

In case Neutral Shell/Insert Adapters are used, the trial reduction is performed with the standard Trial Inserts according to the Shell's insert size (consider Table 2)

Shell	Neutral Shell/Insert Adapter	Insert that fits into Adapter	Trial Insert to choose	Maximum Head Size with Neutral Shell/Insert Adapter
50-52 mm	183-580/01	B	C	32 mm
54-56 mm	183-580/02	C	D	36 mm
58-60 mm	183-580/03	D	E	40 mm
62-72 mm	183-580/04	D	F	40 mm
74-80 mm	183-580/05	F	G	40 mm

Table 2

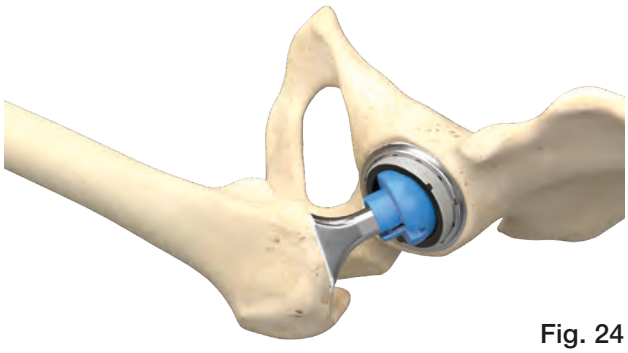


Fig. 24

After reduction of the joint, leg length, joint stability and range of motion is checked (Fig. 24).
The Trial Insert and Trial Shell/Insert Adapter can be removed with the Forceps.

Recommendation: After the trial reduction the acetabulum should be marked at the level of the recess of the Trial Shell/Insert Adapter with a reference mark. This mark will help to align the final Shell/Insert Adapter.

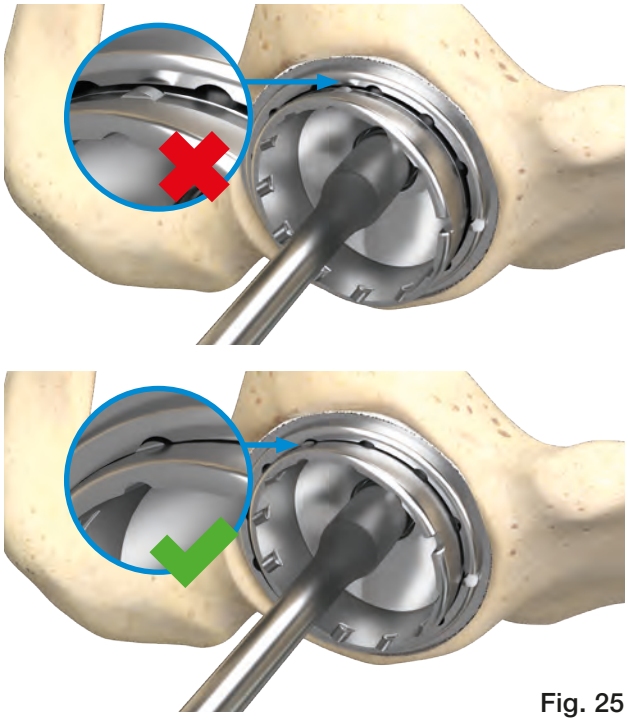


Fig. 25

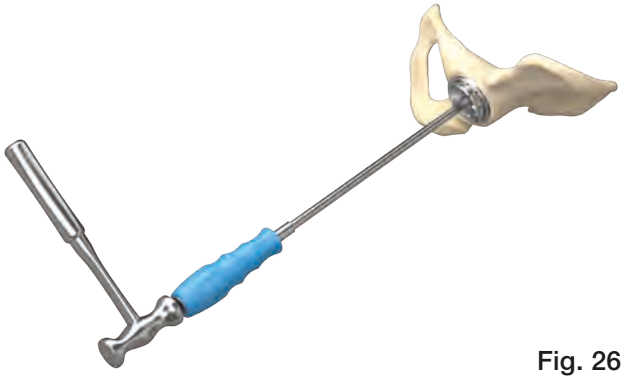


Fig. 26

Adapter Fixation

Before the introduction of the Shell/Insert Adapter, the inside of the Shell must be cleaned carefully and checked that surrounding soft tissues do not interfere with the introduction.

The corresponding Shell/Insert Adapter is chosen according to the table on page 19.

The final Shell/Insert Adapter is placed in the Shell with the Shell/Insert Adapter Impactor and is fixed with an appropriate tap on the Shell/Insert Adapter Impactor (Fig. 25-26).

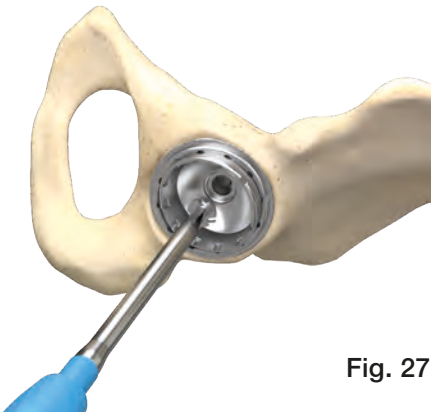


Fig. 27

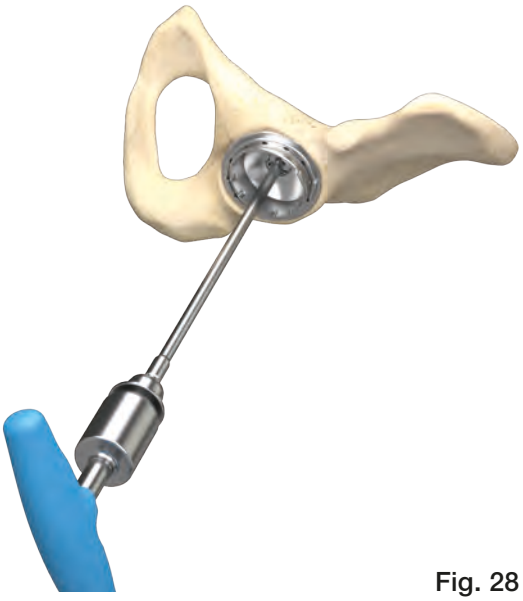


Fig. 28

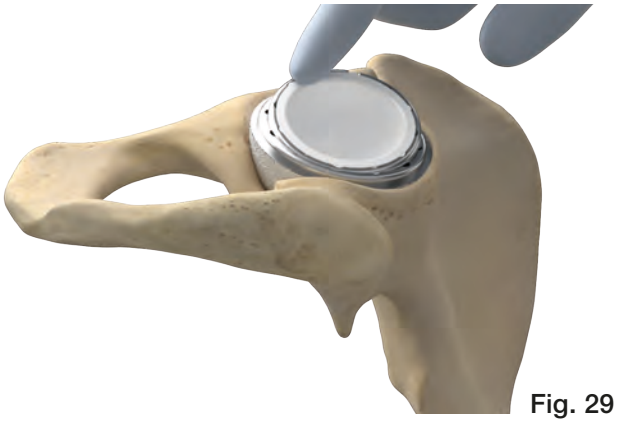


Fig. 29

Offset and/or inclinated Shell/Insert Adapters have to be fixed with the Shell/Insert Adapter Fixation Screw following impaction. This is done by first screwing the Shell/Insert Adapter Fixation Screw all the way in and tighten it gently (Fig. 27).
The Fixation Screw is then finally tightened using the Torque Wrench (Fig. 28).
Once the necessary torque is reached, the Torque Wrench will emit a loud snap.

Note: The torque wrench is supplied with a calibration certificate and separate instructions for use, and must be subjected to a functional test after 250 uses. To this end, the instrument should be sent to Waldemar Link GmbH & Co. KG. The torque wrench must never be used to loosen screw connections, as this could have a negative effect on its function.

After the insertion of the Shell/Insert Adapter, the step „Implantation of the Ceramic Insert“ or „Implantation of the UHMWPE Insert“ follows (Fig. 29).

Note: Shell/Insert Adapter Fixation Screw must only be tightened once.

Note: Only neutral and shouldered Inserts are allowed to be used in conjunction with Shell/Insert Adapters.

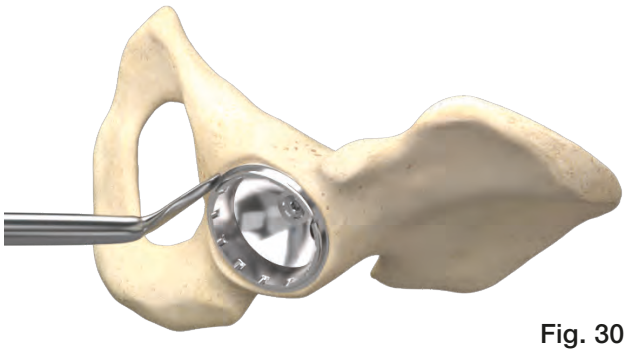


Fig. 30

Removal of the Shell

In case the Shell has to be revised, loosen the peripheral fixation by passing around the Shell with an osteotome (Fig. 30).

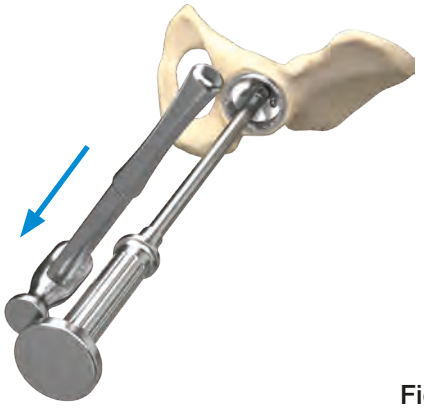


Fig. 31

Open the polar hole by unscrewing the Polar Screw. Consecutively connect the Impactor handle to the polar hole of the Shell. Carefully pull the Shell out of the acetabulum with the help of gentle hammer taps from below on the impactor plate of the Impactor Handle (Fig. 31).

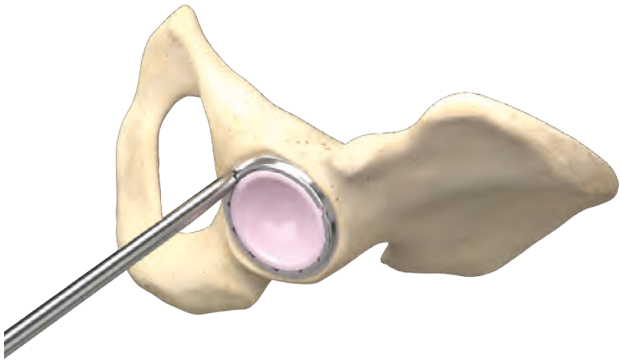


Fig. 32

Removal of a Ceramic Insert

The Ceramic Insert can be removed by placing the Extractor Handle for Ceramic Inserts on different positions on the edge of the Shell and appropriately tapping on the Extractor Handle (Fig. 32). The Insert will leap out due to the vibration.

Caution: For implantation of a new Ceramic Insert, please refer to page 06. The explanted Ceramic Insert must not be re-used

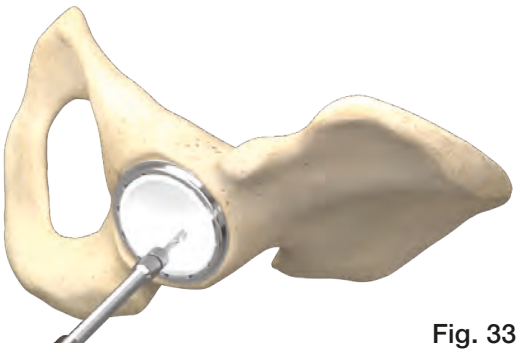


Fig. 33

Removal of a UHWMPE Insert

If removal of the Insert is necessary, pre-drill an off-center hole into the Insert (Fig. 33). Consecutively a self-tapping cancellous bone screw can be screwed into the pre-drilled hole to help remove the Polyethylene Insert (Fig. 34).

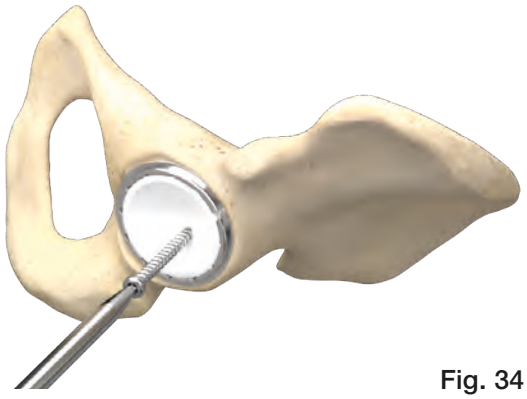


Fig. 34

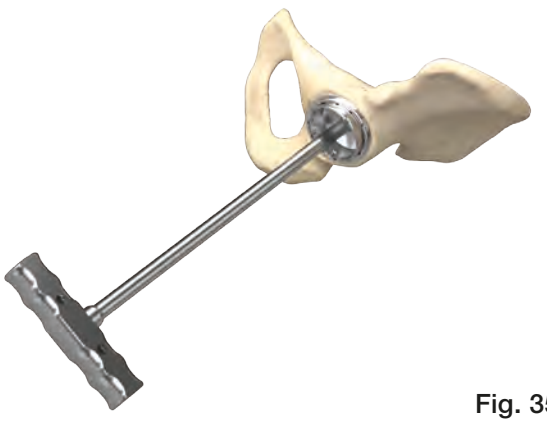
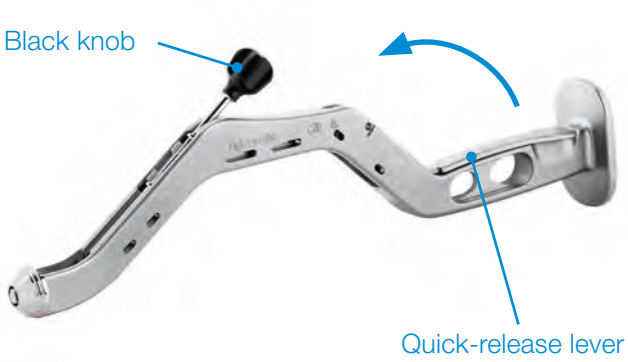


Fig. 35

Removal of a Shell/Insert Adapter

Start with removal of the Insert as described above. Then unscrew the Shell/Insert Adapter Fixation Screw with the Rigid Screwdriver. After the Fixation Screw is removed, screw the Extractor Handle for Shell/Insert Adapter into the thread on the dome of the Shell/Insert Adapter and turn it clockwise until the Adapter is loosened (Fig. 35).



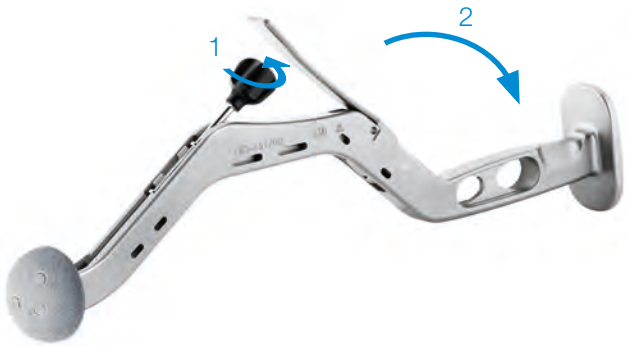
Assembly

Step 1

Open the quick-release lever.

Step 2

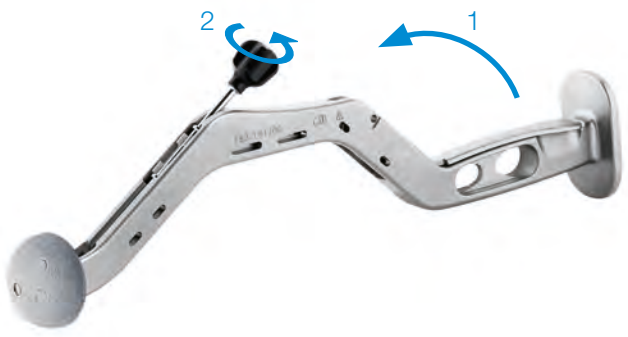
Position the Shell on the front of the Offset Cup Impactor while the quick-release lever is open.
Mount the Shell on the Impactor by turning the black knob clockwise.
Once mounted, the Shell can be rotated and oriented with the knob.



Step 3

Caution: Before closing the quick-release lever, hold the oriented Shell in place and rotate the knob counterclockwise 180° (1).

Close the quick-release lever (2).
The Shell is fixed on the Impactor and can now be implanted.



Disassembly

After impaction of the Shell, open the quick-release lever (1) and loosen the Impactor from the Shell by turning the knob counterclockwise (2).

Caution: While opening the quick release lever, it may spring open quicker than expected due to tensions.

Shells

Material: Tivastan®-S and TiCaP® Double Coating (commercially pure titanium cpTi / calcium phosphate CaP)

TiCaP® Shell, Cluster hole,
incl. 1 polar screw for polar hole

TiCaP® Shell, Multi hole

Shells Item no.	Outer Ø mm	for Insert size	Shells Item no.	Outer Ø mm	for Insert size
183-101/42	42	A			
183-101/44	44				
183-101/46	46	B			
183-101/48	48				
183-101/50	50	C	183-301/50	50	C
183-101/52	52		183-301/52	52	
183-101/54	54	D	183-301/54	54	D
183-101/56	56		183-301/56	56	
183-101/58	58	E	183-301/58	58	E
183-101/60	60		183-301/60	60	
183-101/62	62	F	183-301/62	62	F
183-101/64	64		183-301/64	64	
183-101/66	66		183-301/66	66	
183-101/68	68		183-301/68	68	
183-101/70	70		183-301/70	70	
183-101/72	72		183-301/72	72	
			183-301/74*	74	only in conjunction with Shell/Insert Adapter for Shell size 74-80 mm
			183-301/76*	76	
			183-301/78*	78	
			183-301/80*	80	

* On request (lead time could increase)

Bone Screws for shells
Material: Tivastan®-S

Item no.	Ø x length mm
180-658/15	6.5 x 15
180-658/20	6.5 x 20
180-658/25	6.5 x 25
180-658/30	6.5 x 30
180-658/35	6.5 x 35
180-658/40	6.5 x 40

Spare Polar Screw for shells
Material: Tivastan®-S

Item no.
183-700/00

Inserts for MobileLink® Acetabular Cup Components

Ceramic inserts (BIOLOX® delta XLWzero)
Material: BIOLOX® delta*

Item no.	Head Ø mm	Insert size
183-520/28	28	A
183-530/32	32	B
183-540/32	32	C
183-540/36	36	
183-550/32	32	D
183-550/36	36	
183-550/40	40	
183-560/32	32	E
183-560/36	36	
183-560/40	40	
183-570/36	36	F
183-570/40	40	

*BIOLOX® delta are made by CeramTec GmbH, Plochingen, Germany

Inserts for MobileLink® Acetabular Cup Components

UHMWPE Inserts – X-LINKed®

Standard (Neutral)
Material: X-LINKed® PE

Anti-luxation
Material: X-LINKed® PE
Shoulder height 5 mm

Item no.	Head Ø mm	Insert size
183-350/28	28	A
183-351/28	28	B
183-351/32	32	
183-352/28	28	C
183-352/32	32	
183-352/36	36	
183-353/28	28	D
183-353/32	32	
183-353/36	36	
183-354/28	28	E
183-354/32	32	
183-354/36	36	
183-355/28	28	F
183-355/32	32	
183-355/36	36	

Item no.	Head Ø mm	Insert size
183-740/28	28	A
183-741/28	28	B
183-741/32	32	
183-742/28	28	C
183-742/32	32	
183-742/36	36	
183-743/28	28	D
183-743/32	32	
183-743/36	36	
183-744/28	28	E
183-744/32	32	
183-744/36	36	
183-745/28	28	F
183-745/32	32	
183-745/36	36	

Inserts for MobileLink® Acetabular Cup Components

UHMWPE Inserts – E-Dur®

Standard (Neutral)
Material: X-LINKed® Vit-E PE

Anti-luxation
Material: X-LINKed® Vit-E PE
Shoulder height 5 mm

Item no.	Head Ø mm	Insert size
183-360/28	28	A
183-361/28	28	B
183-361/32	32	
183-362/28	28	C
183-362/32	32	
183-362/36	36	
183-363/28	28	D
183-363/32	32	
183-363/36	36	
183-364/28	28	E
183-364/32	32	
183-364/36	36	
183-365/28	28	F
183-365/32	32	
183-365/36	36	

Item no.	Head Ø mm	Insert size
183-370/28	28	A
183-371/28	28	B
183-371/32	32	
183-372/28	28	C
183-372/32	32	
183-372/36	36	
183-373/28	28	D
183-373/32	32	
183-373/36	36	
183-374/28	28	E
183-374/32	32	
183-374/36	36	
183-375/28	28	F
183-375/32	32	
183-375/36	36	

Shell/Insert Adapter

incl. fixation screw except for the neutral (0 mm offset, 0° inclination) Shell/Insert Adapter
Material: Tivanium®-S

neutral
0 mm offset, 0° inclination

+ 4 mm offset,
0° inclination

+ 4 mm offset,
+ 10° inclination

+ 8 mm offset,
+ 20° inclination

Item no.	for Shell size (Outer Ø)	Offset	Inclination	Insert that fits into Adapter
183-590/01*	**46-48 mm**	+ 4 mm	0°	**A**
183-600/06*		+ 4 mm	10°	
183-610/06*		+ 8 mm	20°	
183-580/01	**50-52 mm**	0 mm	0°	**B**
183-590/02		+ 4 mm	0°	
183-600/01		+ 4 mm	10°	
183-610/01		+ 8 mm	20°	
183-580/02	**54-56 mm**	0 mm	0°	**C**
183-590/03		+ 4 mm	0°	
183-600/02		+ 4 mm	10°	
183-610/02		+ 8 mm	20°	
183-580/03	**58-60 mm**	0 mm	0°	**D**
183-590/04		+ 4 mm	0°	
183-600/03		+ 4 mm	10°	
183-610/03		+ 8 mm	20°	
183-580/04	**62-72 mm**	0 mm	0°	**D**
183-590/05		+ 4 mm	0°	
183-600/04		+ 4 mm	10°	
183-610/04		+ 8 mm	20°	
183-580/05	**74-80 mm**	0 mm	0°	**F**
183-590/06		+ 4 mm	0°	
183-600/05		+ 4 mm	10°	
183-610/05		+ 12 mm	20°	

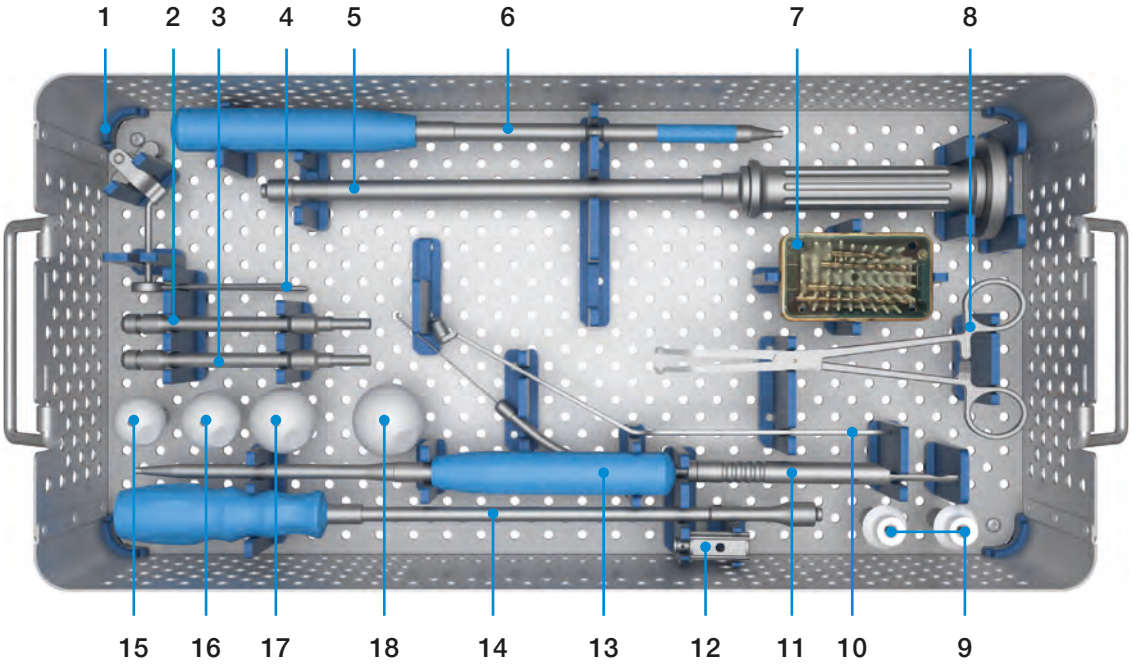
* On request (lead time could increase)

Spare Shell/Insert Adapter Fixation Screw

Material: Tivanium®-S

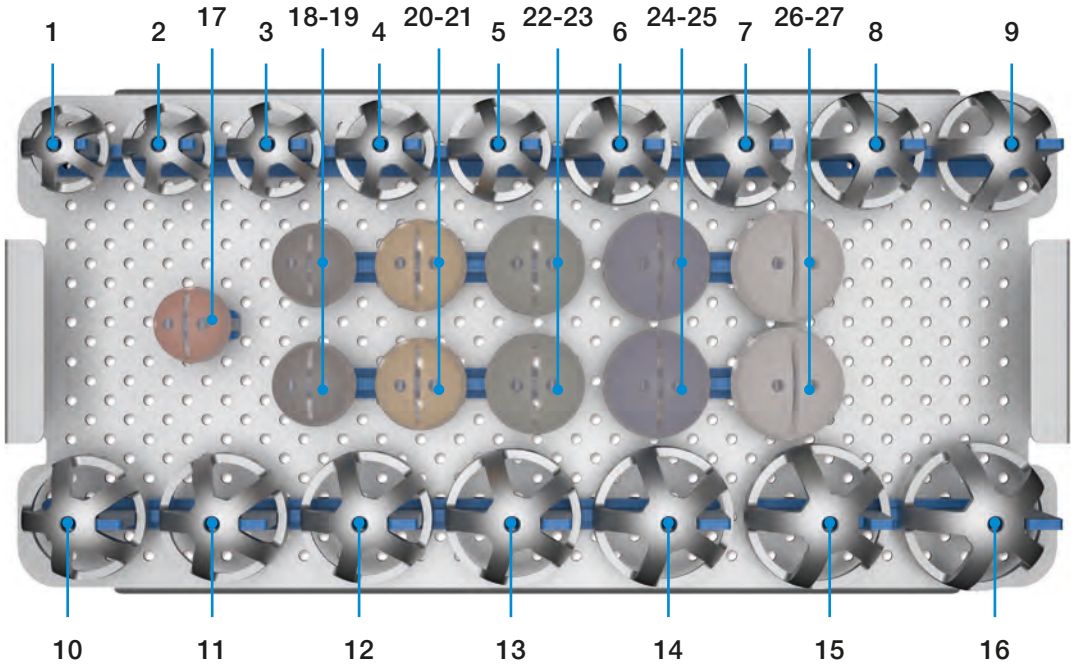
Item no.
183-710/00

183-110/01 MobileLink® Acetabular Cup System, Basic Instruments



1	183-110/11	**Instrument Tray,** empty
2	15-8380/01	**Drill Shaft,** flexible, 134 mm
3	15-8380/02	**Drill Shaft,** straight, 134 mm
4	183-150/04	**Alignment Guide**
5	183-150/03	**Impactor Handle,** straight, 406 mm
6	15-8388/01	**Hex Screwdriver,** flexible, SW 3.5 mm, Ø 3.5 mm, self-holding screw
7	319-601/30	**Sterilizing Box,** contains:
	15-8381/01	Drill Cap, 25 mm, Ø 3.5 mm
	15-8382/01	Drill Cap, 40 mm, Ø 3.5 mm
	15-8383/01	Drill Cap, 50 mm, Ø 3.5 mm
	15-8384/01	Drill Cap, 60 mm, Ø 3.5 mm
8	15-8385/01	**Insertion Forceps** for screws
9	183-137/02	**Suction Pad,** 2x
10	183-138/32	**Drill Guide,** 3.6 mm
11	183-138/36	**Curved Depth Gauge**
12	183-137/01	**Insert Positioner**
13	15-8379/01	**Hex Screwdriver,** straight, SW 3.5 mm; self-holding screw
14	183-131/05	**Universal Handle**
15	183-135/28	**Driver Head,** Ø 28 mm
16	183-135/32	**Driver Head,** Ø 32 mm
17	183-135/36	**Driver Head,** Ø 36 mm
18	183-135/40	**Driver Head,** Ø 40 mm

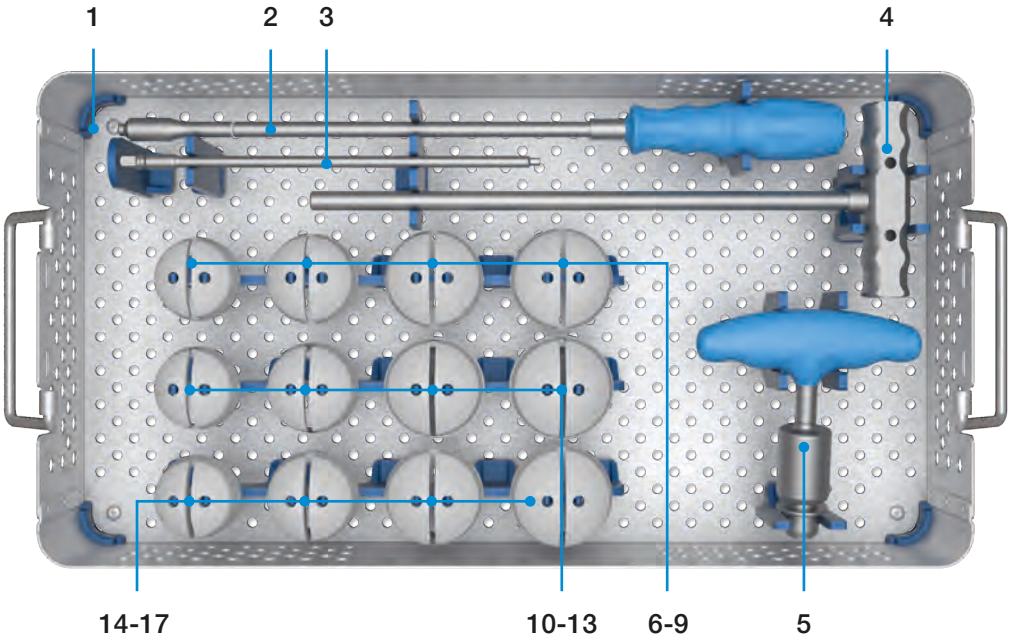
Optional	
183-151/00	**Offset Cup Impactor** (see page 14 for detailed description)
183-135/10	**Final Shell Impactor**



1	183-135/42	**Trial Cup,** Ø 42 mm
2	183-135/44	**Trial Cup,** Ø 44 mm
3	183-135/46	**Trial Cup,** Ø 46 mm
4	183-135/48	**Trial Cup,** Ø 48 mm
5	183-135/50	**Trial Cup,** Ø 50 mm
6	183-135/52	**Trial Cup,** Ø 52 mm
7	183-135/54	**Trial Cup,** Ø 54 mm
8	183-135/56	**Trial Cup,** Ø 56 mm
9	183-135/58	**Trial Cup,** Ø 58 mm
10	183-135/60	**Trial Cup,** Ø 60 mm
11	183-135/62	**Trial Cup,** Ø 62 mm
12	183-135/64	**Trial Cup,** Ø 64 mm
13	183-135/66	**Trial Cup,** Ø 66 mm
14	183-135/68	**Trial Cup,** Ø 68 mm
15	183-135/70	**Trial Cup,** Ø 70 mm
16	183-135/72	**Trial Cup,** Ø 72 mm
17	183-141/28*	**Trial Insert,** Head Ø 28 mm, Insert size A, red
18	183-142/28*	**Trial Insert,** Head Ø 28 mm, Insert size B, black
19	183-142/32*	**Trial Insert,** Head Ø 32 mm, Insert size B, black
20 - 21	183-143/28*	**Trial Insert,** Head Ø 28 mm, Insert size C, yellow
	183-143/32*	**Trial Insert,** Head Ø 32 mm, Insert size C, yellow
	183-143/36*	**Trial Insert,** Head Ø 36 mm, Insert size C, yellow
22 - 23	183-144/28*	**Trial Insert,** Head Ø 28 mm, Insert size D, green
	183-144/32*	**Trial Insert,** Head Ø 32 mm, Insert size D, green
	183-144/36*	**Trial Insert,** Head Ø 36 mm, Insert size D, green
	183-144/40*	**Trial Insert,** Head Ø 40 mm, Insert size D, green
24 - 25	183-145/28*	**Trial Insert,** Head Ø 28 mm, Insert size E, blue
	183-145/32*	**Trial Insert,** Head Ø 32 mm, Insert size E, blue
	183-145/36*	**Trial Insert,** Head Ø 36 mm, Insert size E, blue
	183-145/40*	**Trial Insert,** Head Ø 40 mm, Insert size E, blue
26 - 27	183-146/28*	**Trial Insert,** Head Ø 28 mm, Insert size F, grey
	183-146/32*	**Trial Insert,** Head Ø 32 mm, Insert size F, grey
	183-146/36*	**Trial Insert,** Head Ø 36 mm, Insert size F, grey
	183-146/40*	**Trial Insert,** Head Ø 40 mm, Insert size F, grey

* On request (not included in set configuration 183-110/01)

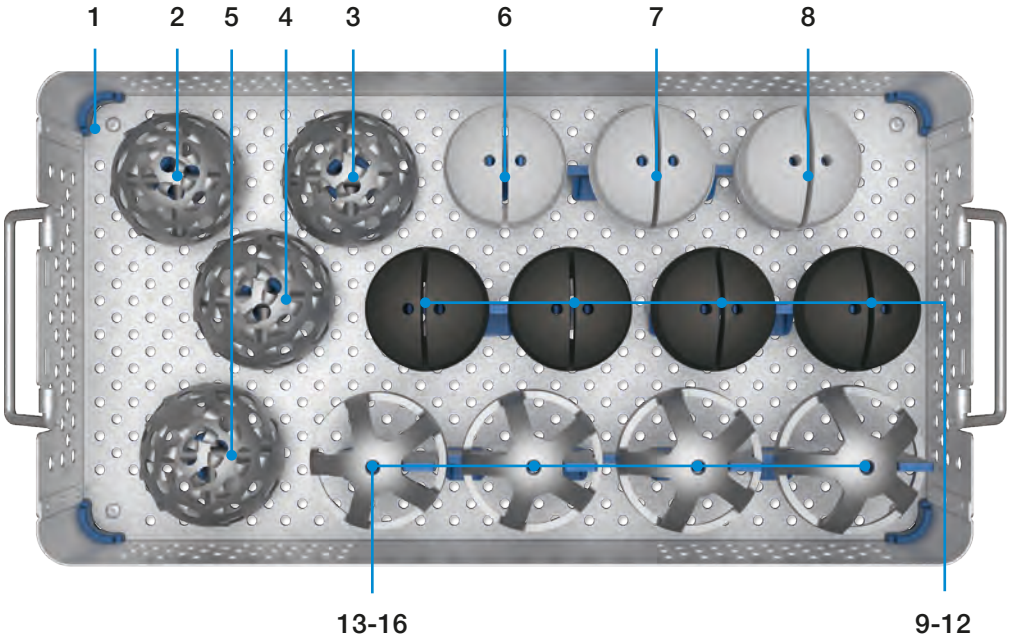
183-110/02 MobileLink® Acetabular Cup System, Revision Instruments



1	183-110/12	**Instrument Tray,** empty
2	183-168/01	**Impactor for Shell/Insert Adapter**
3	183-167/02	**Torque Limiter Rod**
4	183-169/02	**Extractor for Shell/Insert Adapter**
5	183-167/01	**T-Handle** with Torque Limiter
6	183-162/02	**Trial Shell/Insert Adapter,** + 4 mm offset, for Shell size 50-52 mm
7	183-162/03	**Trial Shell/Insert Adapter,** + 4 mm offset, for Shell size 54-56 mm
8	183-162/04	**Trial Shell/Insert Adapter,** + 4 mm offset, for Shell size 58-60 mm
9	183-162/05	**Trial Shell/Insert Adapter,** + 4 mm offset, for Shell size 62-72 mm
10	183-163/01	**Trial Shell/Insert Adapter,** + 4 mm offset, 10° inclination, for Shell size 50-52 mm
11	183-163/02	**Trial Shell/Insert Adapter,** + 4 mm offset, 10° inclination, for Shell size 54-56 mm
12	183-163/03	**Trial Shell/Insert Adapter,** + 4 mm offset, 10° inclination, for Shell size 58-60 mm
13	183-163/04	**Trial Shell/Insert Adapter,** + 4 mm offset, 10° inclination, for Shell size 62-72 mm
14	183-164/01	**Trial Shell/Insert Adapter,** + 8 mm offset, 20° inclination, for Shell size 50-52 mm
15	183-164/02	**Trial Shell/Insert Adapter,** + 8 mm offset, 20° inclination, for Shell size 54-56 mm
16	183-164/03	**Trial Shell/Insert Adapter,** + 8 mm offset, 20° inclination, for Shell size 58-60 mm
17	183-164/04	**Trial Shell/Insert Adapter,** + 8 mm offset, 20° inclination, for Shell size 62-72 mm

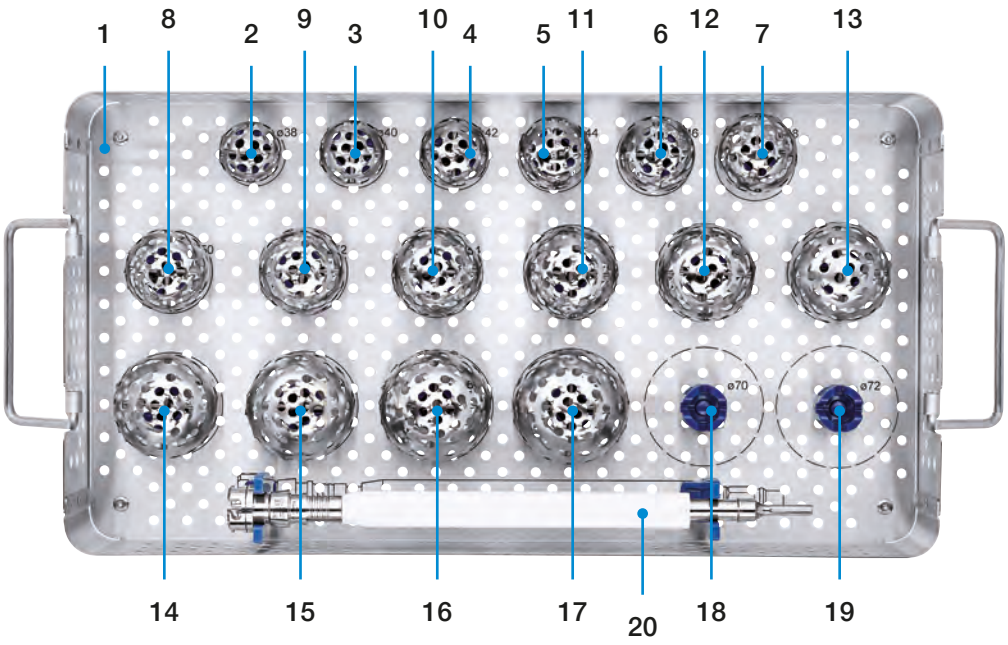
Optional	
183-169/01	**Extractor for Ceramic Inserts**
183-162/01	**Trial Shell/Insert Adapter,** 4 mm offset, for Shell size 46-48 mm
183-163/06	**Trial Shell/Insert Adapter,** 4 mm offset, 10° inclination, for Shell size 46-48 mm
183-164/06	**Trial Shell/Insert Adapter,** 4 mm offset, 20° inclination, for Shell size 46-48 mm

183-110/03 MobileLink® Acetabular Cup System, Instruments for 74-80 mm



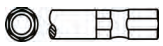
1	183-110/13	**Instrument Tray,** empty
2	131-170/74	**Acetabular Reamer Head,** Reamer-Ø 74 mm
3	131-170/76	**Acetabular Reamer Head,** Reamer-Ø 76 mm
4	131-170/78	**Acetabular Reamer Head,** Reamer-Ø 78 mm
5	131-170/80	**Acetabular Reamer Head,** Reamer-Ø 80 mm
6	183-162/06	**Trial Shell/Insert Adapter,** + 4 mm offset, for Shell size 74-80 mm
7	183-163/05	**Trial Shell/Insert Adapter,** + 4 mm offset, 10° inclination, for Shell size 74-80 mm
8	183-164/05	**Trial Shell/Insert Adapter,** + 12 mm offset, 20° inclination, for Shell size 74-80 mm
9	183-147/28	**Trial Insert,** Head Ø 28 mm, neutral, Insert size G, grey
10	183-147/32	**Trial Insert,** Head Ø 32 mm, neutral, Insert size G, grey
11	183-147/36	**Trial Insert,** Head Ø 36 mm, neutral, Insert size G, grey
12	183-147/40	**Trial Insert,** Head Ø 40 mm, neutral, Insert size G, grey
13	183-135/74	**Trial Cup,** Ø 74 mm
14	183-135/76	**Trial Cup,** Ø 76 mm
15	183-135/78	**Trial Cup,** Ø 78 mm
16	183-135/80	**Trial Cup,** Ø 80 mm

132-260/01 Instrument Set for LINK® Acetabular Reamers

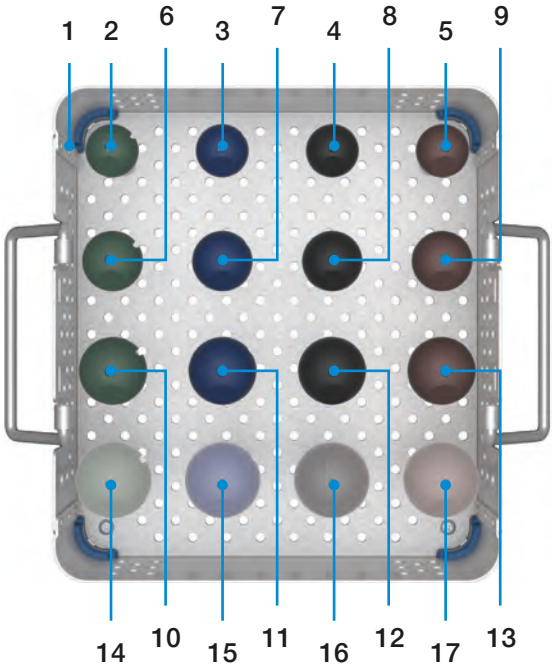


1	132-260/10	**Instrument Tray,** empty
2	131-170/38	**Acetabular Reamer Head,** Reamer-Ø 38 mm
3	131-170/40	**Acetabular Reamer Head,** Reamer-Ø 40 mm
4	131-170/42	**Acetabular Reamer Head,** Reamer-Ø 42 mm
5	131-170/44	**Acetabular Reamer Head,** Reamer-Ø 44 mm
6	131-170/46	**Acetabular Reamer Head,** Reamer-Ø 46 mm
7	131-170/48	**Acetabular Reamer Head,** Reamer-Ø 48 mm
8	131-170/50	**Acetabular Reamer Head,** Reamer-Ø 50 mm
9	131-170/52	**Acetabular Reamer Head,** Reamer-Ø 52 mm
10	131-170/54	**Acetabular Reamer Head,** Reamer-Ø 54 mm
11	131-170/56	**Acetabular Reamer Head,** Reamer-Ø 56 mm
12	131-170/58	**Acetabular Reamer Head,** Reamer-Ø 58 mm
13	131-170/60	**Acetabular Reamer Head,** Reamer-Ø 60 mm
14	131-170/62	**Acetabular Reamer Head,** Reamer-Ø 62 mm
15	131-170/64	**Acetabular Reamer Head,** Reamer-Ø 64 mm
16	131-170/66	**Acetabular Reamer Head,** Reamer-Ø 66 mm
17	131-170/68	**Acetabular Reamer Head,** Reamer-Ø 68 mm
18	131-170/70*	**Acetabular Reamer Head,** Reamer-Ø 70 mm
19	131-170/72*	**Acetabular Reamer Head,** Reamer-Ø 72 mm
20	131-171B**	**Shaft with Handle for acetabular reamer,** 312 mm, fittings optional
	131-171/01	**Handle** for 131-171B - H

* On request (not included in set configuration 132-260/01)
** How to order: 131-171E = with Jacobs Chuck fitting

				
B	**C**	**D**	**E**	**H**
Hudson	Harris	AO	Jacobs Chuck	Zimmer

183-110/06 Additional Instruments, Trial Heads



1	183-110/16	**Instrument Tray,** empty
2	175-928/11	**Trial Head,** PPSU, Taper 12/14, Ø 28 mm, Neck length short (-3.5 mm), green
3	175-928/12	**Trial Head,** PPSU, Taper 12/14, Ø 28 mm, Neck length medium (0.0 mm), blue
4	175-928/13	**Trial Head,** PPSU, Taper 12/14, Ø 28 mm, Neck length long (+3.5 mm), black
5	175-928/14	**Trial Head,** PPSU, Taper 12/14, Ø 28 mm, Neck length extra long (+10.5 mm), brown
6	175-932/11	**Trial Head,** PPSU, Taper 12/14, Ø 32 mm, Neck length short (-4.0 mm), green
7	175-932/12	**Trial Head,** PPSU, Taper 12/14, Ø 32 mm, Neck length medium (0.0 mm), blue
8	175-932/13	**Trial Head,** PPSU, Taper 12/14, Ø 32 mm, Neck length long (+4.0 mm), black
9	175-932/14	**Trial Head,** PPSU, Taper 12/14, Ø 32 mm, Neck length extra long (+8.5 mm), brown
10	175-936/11	**Trial Head,** PPSU, Taper 12/14, Ø 36 mm, Neck length short (-4.0 mm), green
11	175-936/12	**Trial Head,** PPSU, Taper 12/14, Ø 36 mm, Neck length medium (0.0 mm), blue
12	175-936/13	**Trial Head,** PPSU, Taper 12/14, Ø 36 mm, Neck length long (+4.0 mm), black
13	175-936/14	**Trial Head,** PPSU, Taper 12/14, Ø 36 mm, Neck length extra long (+8.0 mm), brown
14	175-940/11*	**Trial Head,** PPSU, Taper 12/14, Ø 40 mm, Neck length short (-4.0 mm), green
15	175-940/12*	**Trial Head,** PPSU, Taper 12/14, Ø 40 mm, Neck length medium (0.0 mm), blue
16	175-940/13*	**Trial Head,** PPSU, Taper 12/14, Ø 40 mm, Neck length long (+4.0 mm), black
17	175-940/14*	**Trial Head,** PPSU, Taper 12/14, Ø 40 mm, Neck length extra long (+8.0 mm), brown

* On request (not included in set configuration 183-110/06)

Accessories

X-ray Templates for MobileLink® Acetabular Cup System, 110 % actual size

Item no.	X-ray templates
183-170/01	**MobileLink® X-ray template** for Shell
183-170/02	**MobileLink® X-ray template** for Shell/Insert Adapter

Instructions for Cleaning and Maintenance

Specific instructions for instruments are available on request from customer@linkhh.de

For more information please register for our LINK Media Library (linkorthopaedics.com)

Specified Indications and Contraindications: **MobileLink® Acetabular Cup System**
General Indications
Mobility-limiting diseases, fractures or defects of the hip joint or proximal femur which cannot be treated by conservative or osteosynthetic procedures
Indications
Primary and secondary osteoarthritis
Rheumatoid arthritis
Correction of functional deformities
Avascular necrosis
Femoral neck fractures
Revision after implant loosening dependent on bone mass and quality
Contraindications
Poor general state of health
Acute and chronic infections, local and systemic
Allergies to (implant) materials
Distinctive muscular-, nerve-, vascular or other diseases which put the affected limb at risk
Insufficient/inadequate bone mass- or quality which prevents a stable anchorage of the prosthesis

Please note: These indications/contraindications refer to standard cases. The ultimate decision on whether or not an implant is suitable for a patient must be made by the surgeon based on his/her individual analysis and his/her experience.

Important Information

Please note the following regarding the use of our implants:

1. **Choosing the right implant is very important.**
   The size and shape of the human bone determines the size and shape of the implant and also limits the load capacity. Implants are not designed to withstand unlimited physical stress. Demands should not exceed normal functional loads.

2. **Correct handling of the implant is very important.**
   Under no circumstances should the shape of a finished implant be altered, as this shortens its life span.
   Our implants must not be combined with implants from other manufacturers.

   The instruments indicated in the Surgical Technique must be used to ensure safe implantation of the components.

3. **Implants must not be reused.**
   Implants are supplied sterile and are intended for single use only. Used implants must not be used again.

4. **After-treatment is also very important.**
   The patient must be informed of the limitations of the implant. The load capacity of an implant cannot compare with that of healthy bone!

5. **Unless otherwise indicated, implants are supplied in sterile packaging.**
   Note the following conditions for storage of packaged implants:

- Avoid extreme or sudden changes in temperature.
- Sterile implants in their original, intact protective packaging may be stored in permanent buildings up until the “Use by” date indicated on the packaging.
- They must not be exposed to frost, dampness or direct sunlight, or mechanical damage.
- Implants may be stored in their original packaging for up to 5 years after the date of manufacture. The “Use by” date is indicated on the product label.
- Do not use an implant if the packaging is damaged.

6. **Traceability is important.**
   Please use the documentation stickers provided to ensure traceability.

7. **Further information** on the material composition is available on request from the manufacturer.

Follow the instructions for use!

Waldemar Link GmbH & Co. KG, Hamburg

The Surgical Technique described has been written to the best of our knowledge and belief, but it does not relieve the surgeon of his/her responsibility to duly consider the particularities of each individual case.

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