



Pelvis Support

Type RR & Type RC

Surgical Technique

CE 0482

Explanation of Pictograms			
	Manufacturer		Article number
	Material number		Product meets the applicable requirements, which are regulated in the EU harmonization legislation for the affixing of the CE marking.

Pelvis Support

Type RR & Type RC

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Preoperative Planning

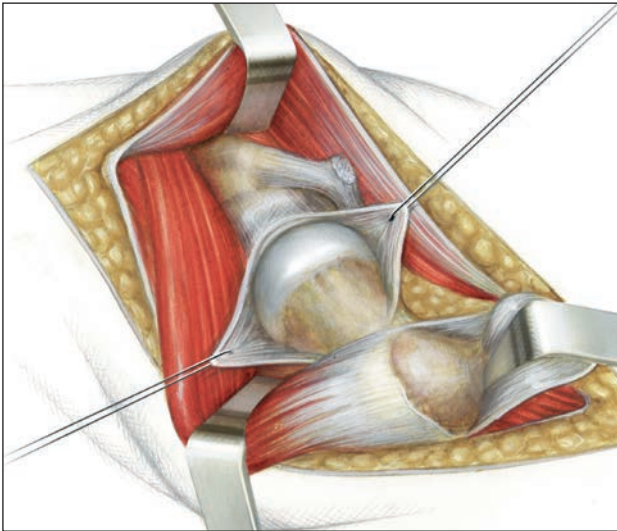
Even with good preoperative planning, extensive bone loss represents a common and unforeseeable challenge for surgeons in revision cases.

Thorough preoperative planning is essential to achieve good surgical results. The aim in preoperative planning is to determine how the center of rotation can be restored and to establish the positions of the LINK Pelvis Support and the fixation screws.

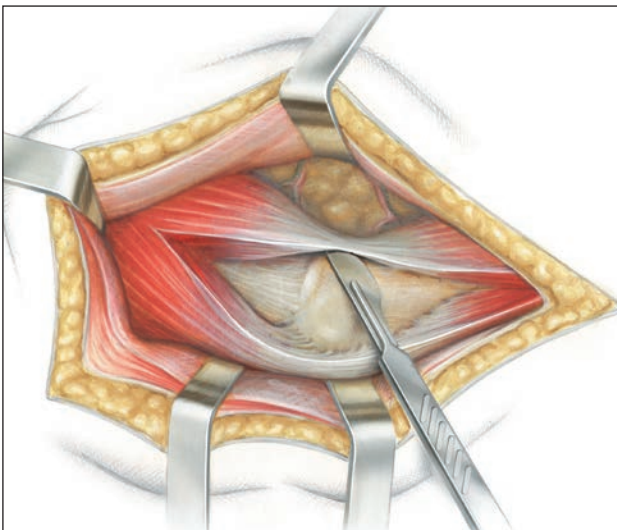
Measurement tables and X-ray templates for LINK Pelvis Support Type RR and Type RC are available to aid planning. They allow the surgeon to determine precisely which implants are to be used. Preoperative planning is based on X-ray images which are either true to scale or supplied with details of the enlargement factor employed. LINK X-ray templates show implants at a standard magnification factor of 110%. Other magnification factors can be supplied. For suppliers of digital planning software we can, on request, provide the relevant data in standard formats.

In contrast to normal hip prosthesis implantation, cases with extensive bone loss require treatment that is tailored to each individual situation. Situations involving extensive bone loss have special problems and, as a result, a greater risk than the implantation of a standard prosthesis. The construction characteristics of the LINK Pelvis Support implants and their specially designed instruments help to reduce this risk.

Surgical Approaches



(A) **Watson Jones**



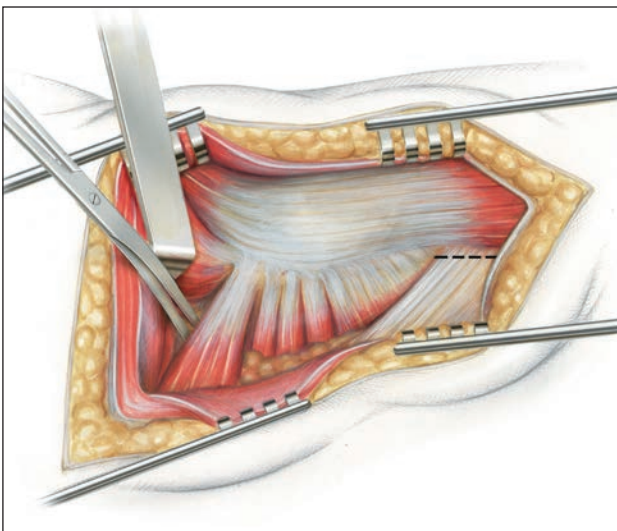
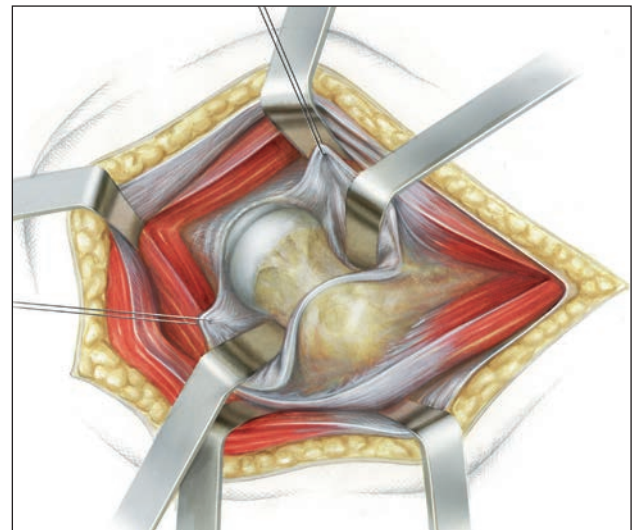
(B) **Hardinge**

The choice of the approach depends on the surgeon's experience and his/her decision based on the individual situation.

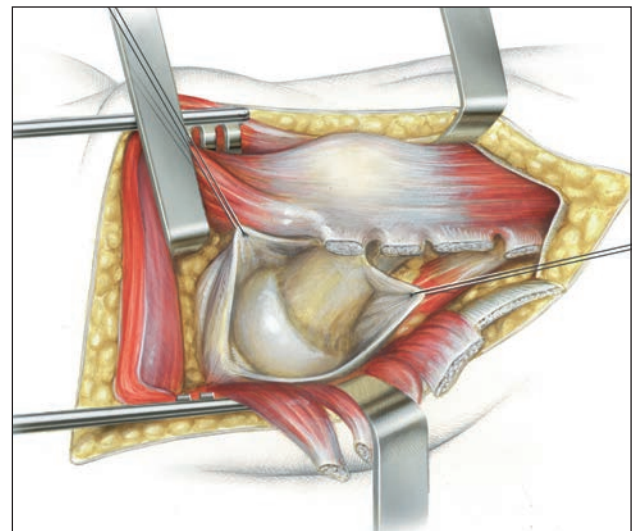
The following approaches are usual:

- antero-lateral – **Watson Jones** (A)
- direct lateral – **Hardinge** (B)
- postero-lateral – **Moore** (C)

Posterolateral access is often preferred because the posterior, superior and inferior acetabular landmarks are clearly visible.



(C) **Moore**



Surgical Technique

Fig. 01



Preparing the acetabulum

After gaining access and, if necessary, removal of the previous implant, debride the acetabulum and ream up to slightly bleeding cancellous bone with a small spherical acetabulum reamer.

Fig. 02



Evaluation of defects

Following debridement, evaluate the situation with regard to defects and determine the size of the implant to be used. For the LINK Pelvis Support Type RR, spherical acetabulum reamers can be used to help verify the choice of implant size made during preoperative planning. For the LINK Pelvis Support Type RC, right- and left-sided Trial Prostheses ([15-8360/44-62](#), [15-8370/44-62](#)) are available to aid determination of the required implant size. Unlike the implant itself, these do not have a caudal flange and can be inserted right to the floor of the acetabulum. The point at which the caudal flange is to be inserted can be marked with the aid of the Trial Prosthesis. After insertion the Trial Prosthesis can also be helpful when judging the defect and estimating the amount of bone material needed to fill in.

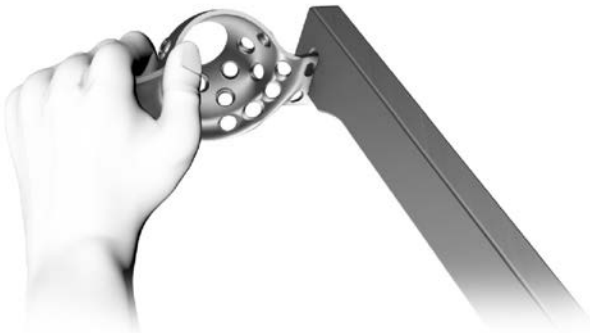
Fig. 03



Reaming the acetabulum

Ream the acetabulum stepwise with the spherical acetabulum reamers until the implant size is reached. The last acetabulum reamer used must have the same outer diameter as the implant selected.

Fig. 04



Adjusting the implant

Use the Rod Bender (15-8262/01) and the Bending Iron (64-8060) to adjust the cranial flanges of the LINK Pelvis Support Type RC to suit the patient's anatomy. To prevent material fatigue, one may only bend the flange once (in one direction) and up to a maximum of 15°.

CAUTION:

Reverse adjustment is not allowed.

Fig. 05



Opening the entry point on the ischium

For the LINK Pelvis Support Type RC, use the angled osteotome (15-8387/01) to open and deepen the entry point for the caudal flange that was marked on the ischium with the aid of the Trial Prosthesis. The triangular tip of the Chisel is about as wide as the flange of the implant.

Fig. 06



Inserting the implants

The LINK Pelvis Support implant Type RC is placed in the acetabulum so that its supporting flange rests on the cranio-dorsal edge of the acetabulum. First insert the caudal flange in the ischium. You can use the Ball Pike (15-1125/01) to assist the caudal flange insertion. To do so the tip of the Ball Pike can be placed through one of the screw holes in the implant. Then insert the implant in the direction of the medial wall of the acetabulum until it lies flush with the bone. The Ball Pike or a Driver can also be useful for this.

Fig. 07



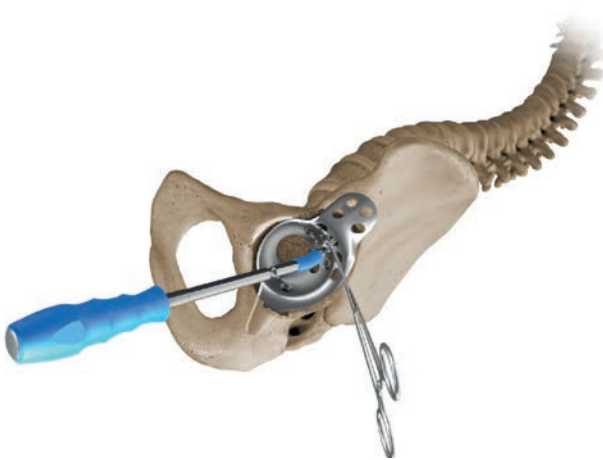
Screw holes

LINK Pelvis Supports Type RR & Type RC are fixed with 3-5 cancellous bone screws made from titanium alloy, Ø 6.5 mm.

Both implant designs provide sufficient additional holes to allow secure fixation. Holes are drilled in the bone to take the screws.

The instrument set includes four Drill Bits of different lengths (15-8381/01 to 15-8384/01). Mount one of these on the Flexible Drill Shaft (15-8380/01). Hold the Drill Guide (183-138/32) against the hole in the implant intended for the screw. Insert the Drill in the Drill Guide. Drill to the required depth or until the Drill Bit is inserted to its full length (25, 40, 50 or 60 mm). If the Drill Bit is not to be inserted to its full length, the depth can be checked by measuring with the Screw Depth Gauge (183-138/36). Take care when drilling. There is a risk of damaging nerves and blood vessels.

Fig. 08

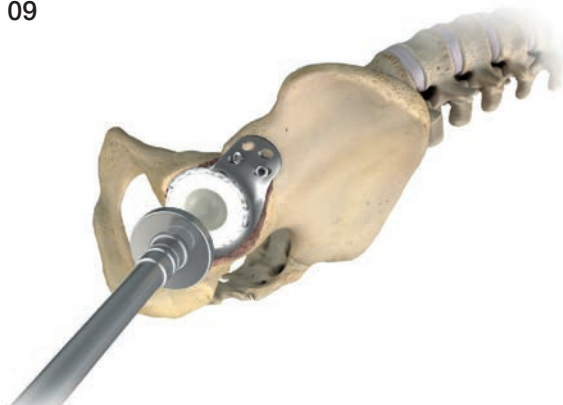


Inserting the screws

Hold each Cancellous Bone Screw with the Insertion Forceps (15-8385/01) and place it into the hole that has been drilled. Then screw it in with the rigid or flexible Hex Screwdriver SW 3.5 mm (15-8388/01, 15-8379/01) and tighten it.



Fig. 09



Please refer to the surgical technique of the cemented acetabular cup of choice.



Pelvis Support Type RR

MAT cp titanium, uncemented

REF	Side	Outer (OD)-Ø (mm)	Inner-Ø (mm)	Maximum Outer-Ø cup (mm)
15-8300/42	neutral	48	44	42*
15-8300/44	neutral	50	46	44*
15-8300/46	neutral	52	48	46*
15-8300/48	neutral	54	50	48*
15-8300/50	neutral	56	52	50*
15-8300/52	neutral	58	54	52*
15-8300/54	neutral	60	56	54*
15-8300/56	neutral	62	58	56*
15-8300/58	neutral	64	60	58*

Pelvis Support Type RR

MAT cp titanium & CaP, uncemented

REF	Side	Outer (OD)-Ø (mm)	Inner-Ø (mm)	Maximum Outer-Ø cup (mm)
15-8310/42	neutral	48	44	42*
15-8310/44	neutral	50	46	44*
15-8310/46	neutral	52	48	46*
15-8310/48	neutral	54	50	48*
15-8310/50	neutral	56	52	50*
15-8310/52	neutral	58	54	52*
15-8310/54	neutral	60	56	54*
15-8310/56	neutral	62	58	56*
15-8310/58	neutral	64	60	58*

* When using cups without distance pegs. Cups that have distance pegs must be 4 mm smaller than the innerdiameter.

The Pelvis Support Type RR & Type RC are to be used in conjunction with commercially available cemented LINK acetabular cups.



Pelvis Support Type RC

MAT cp titanium, uncemented

REF	Side	Outer (OD)-Ø (mm)	Inner-Ø (mm)	Maximum Outer-Ø cup (mm)
15-8320/44	right	50	46	44*
15-8320/50	right	56	52	50*
15-8320/56	right	62	58	56*
15-8320/62	right	68	64	62*
15-8330/44	left	50	46	44*
15-8330/50	left	56	52	50*
15-8330/56	left	62	58	56*
15-8330/62	left	68	64	62*

Pelvis Support Type RC

MAT cp titanium & CaP, uncemented

REF	Side	Outer (OD)-Ø (mm)	Inner-Ø (mm)	Maximum Outer-Ø cup (mm)
15-8340/44	right	50	46	44*
15-8340/50	right	56	52	50*
15-8340/56	right	62	58	56*
15-8340/62	right	68	64	62*
15-8350/44	left	50	46	44*
15-8350/50	left	56	52	50*
15-8350/56	left	62	58	56*
15-8350/62	left	68	64	62*

* When using cups without distance pegs. Cups that have distance pegs must be 4 mm smaller than the innerdiameter.

The Pelvis Support Type RR & Type RC are to be used in conjunction with commercially available cemented LINK acetabular cups.

Cancellous Bone Screws

MAT Tilastan-S

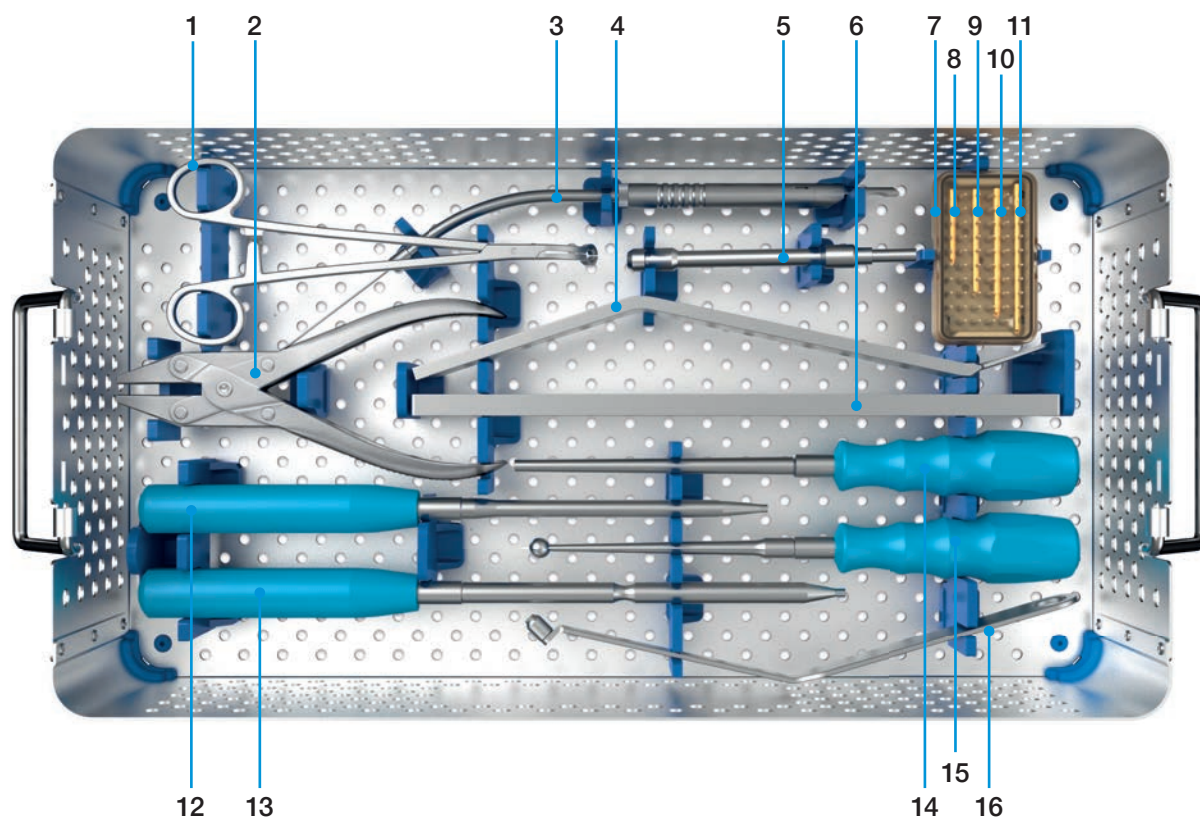


REF	Ø x length (mm)	REF	Ø x length (mm)
180-658/15	6.5 x 15	180-658/45	6.5 x 45
180-658/20	6.5 x 20	180-658/50	6.5 x 50
180-658/25	6.5 x 25	180-658/55	6.5 x 55
180-658/30	6.5 x 30	180-658/60	6.5 x 60
180-658/35	6.5 x 35	180-658/70	6.5 x 70
180-658/40	6.5 x 40	180-658/80	6.5 x 80

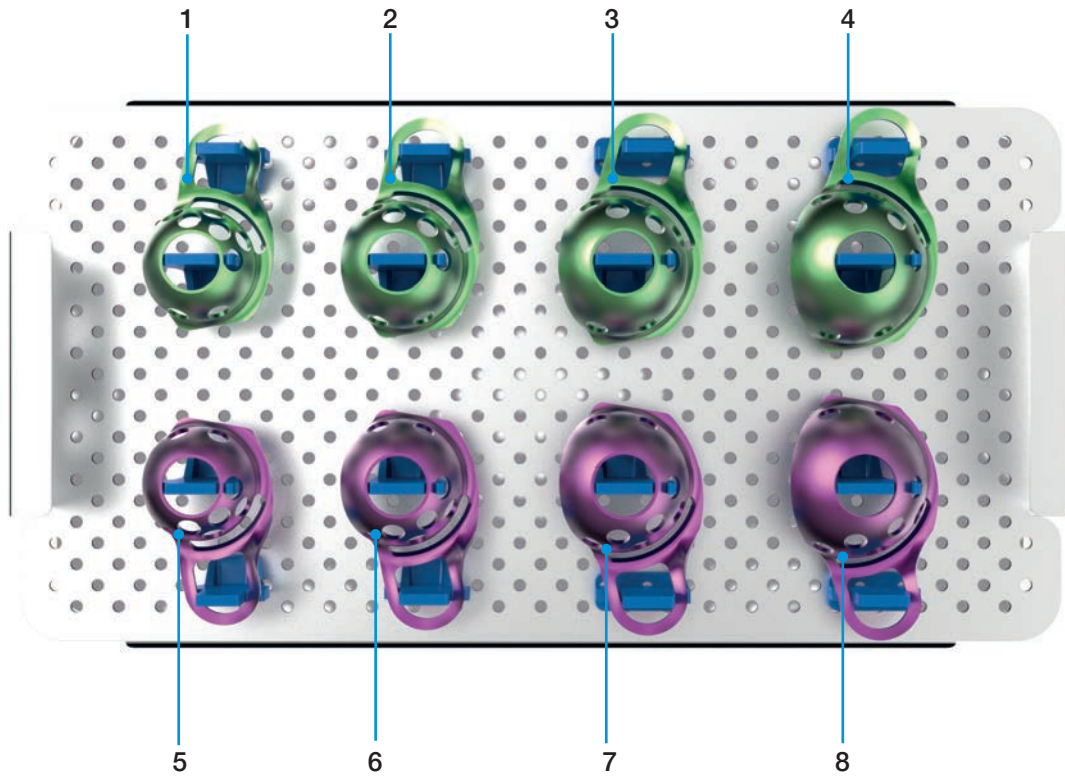
Instrument Set, complete



REF	Description
15-8300/02	Instrument set , complete
15-8320/02	Container set , only, with tray insert and lid, perforated stainless steel, 478 x 253 x 106 mm

15-8320/02 Instrument Set, complete


	REF	Description
1	15-8385/01	Insertion Forceps for screws, 190 mm
2	64-4200/14	Parallel Grip Pliers, 185 mm
3	183-138/36	Curved Depth Gauge
4	15-8387/01	Osteome set, Off-set, for flanges
5	15-8380/01	Drill Shaft, flexible, 134 mm
6	64-8060	Bending Iron, 300 mm
7	319-601/30	Sterilizing box, contains:
8	15-8381/01	Drill Cap, 25 mm, Ø 3.5 mm
9	15-8382/01	Drill Cap, 40 mm, Ø 3.5 mm
10	15-8383/01	Drill Cap, 50 mm, Ø 3.5 mm
11	15-8384/01	Drill Cap, 60 mm, Ø 3.5 mm
12	15-8379/01	Hex Screwdriver, straight, SW 3.5 mm
13	15-8388/01	Hex Screwdriver, flexible, SW 3.5 mm, 305 mm, Ø 3.5 mm
14	15-8262/01	Rod Bender, for flanges, 235 mm
15	15-1125/01	Ball Pike, 245 mm
16	183-138/32	Drill Guide, 3.6 mm



	REF	Description	Version	Type	OD-Ø mm	Inner-Ø mm	max. OD-Ø for Cups mm
1	15-8360/44	Trial Prosthesis	right	RC	50	46	44
2	15-8360/50	Trial Prosthesis	right	RC	56	52	50
3	15-8360/56	Trial Prosthesis	right	RC	62	58	56
4	15-8360/62	Trial Prosthesis	right	RC	68	64	62
5	15-8370/44	Trial Prosthesis	left	RC	50	46	44
6	15-8370/50	Trial Prosthesis	left	RC	56	52	50
7	15-8370/56	Trial Prosthesis	left	RC	62	58	56
8	15-8370/62	Trial Prosthesis	left	RC	68	64	62

X-ray Templates

X-ray templates for LINK Pelvis Support

110% natural size

REF	X-ray templates
15-8390/01	for LINK Pelvis Support Type RR, uncemented
15-8391/01	for LINK Pelvis Support Type RC, uncemented

Instructions for Cleaning and Maintenance

Instructions for the instrument sets are available on request from info@link-ortho.com.

Literature



For more information please register for our LINK Media Library (link-ortho.com).

Please note the following regarding the use of our implants:

Follow the instructions for use!

For detailed product information, including indications and contraindications, precautions and warnings, etc. please consult the product's Instructions For Use (IFU) prior to use.



eifu.link-ortho.com

Waldemar Link GmbH & Co. KG, Hamburg, Germany

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