

AESCULAP®
Acetabular Solutions
Orthopaedic Surgery

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Acetabular reamers and shanks



- Reamer heads with cross mounting
- Straight and curved reamer shanks
- Hemispherical reamer heads with diameters 38-72 mm
- To be used in combination with all AESCULAP® cup implants

Acetabular reamer heads

Outer diameter	Art. no.
ø 38 mm	NF938R
ø 40 mm	NF940R
ø 42 mm	NF942R
ø 44 mm	NF944R
ø 46 mm	NF946R
ø 48 mm	NF948R
ø 50 mm	NF950R
ø 52 mm	NF952R
ø 54 mm	NF954R
ø 56 mm	NF956R
ø 58 mm	NF958R
ø 60 mm	NF960R
ø 62 mm	NF962R
ø 64 mm	NF964R
ø 66 mm	NF966R
ø 68 mm	NF968R
ø 70 mm	NF970R
ø 72 mm	NF982R

Note

Acetabular reamers are available on request in increments of 1 mm between the sizes 38 mm - 68 mm.



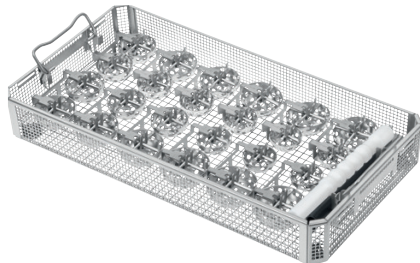
Straight reamer shanks, for navigation	Art. no.
Reamer shank ZIMMER	NF985R
Reamer shank Harris	NF986R
Reamer shank AO	NF987R
OrthoPilot® Navigation sleeve	FS939
Standard protection sleeve	FS974



Reamer Module	Art. no.
Half module tray with supports for reamers ø 44 - 68 mm, one straight reamer shank and protection sleeve 465 x 118 x 45 mm	NT635R

Note

Please order all reamer components separately.



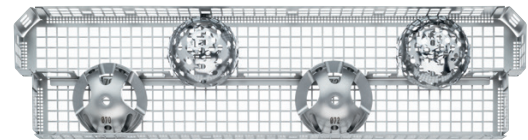
Tray NF933R

485 x 253 x 76 mm

With supports for:	Art. no.
24 reamer attachments heads and two straight reamer shanks	
OrthoPilot® Navigation sleeve	FS939
Standard protection sleeve	FS974

Lid JH217R
489 x 257 mm

Recommended container JK440
592 x 274 x 90 mm
Lid JK489

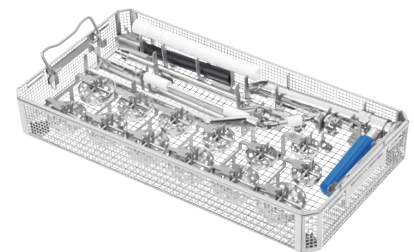


Plasmafit® Revision Module 70/72 mm NT574

70/72 mm Module	Art. no.
Half module tray with supports for reamers and trial cups, sizes ø 70 and 72 mm 465 x 118 x 45 mm	NT575R
Trial cup ø 70 mm K	NT570R
Trial cup ø 72 mm K	NT572R
Acetabulum reamer ø 70 mm	NF970R
Acetabulum reamer ø 72 mm	NF982R



Curved reamer shanks	Art. no.
Reamer shank HARRIS	NF936R
Reamer shank AO	NF937R



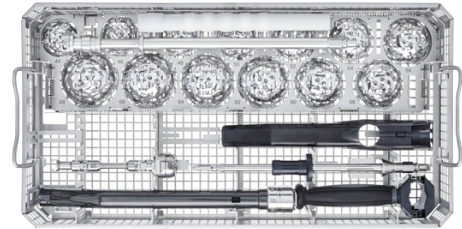
Tray NF932R

485 x 253 x 76 mm

With supports for:	Art. no.
13 reamer heads, 2 straight and 1 curved reamer shank	
OrthoPilot® sleeve	FS939
Standard sleeve	FS974

Lid JH217R
489 x 257 mm

Packing stencil TE895



Tray NF993R
485 x 253 x 76 mm

Curved reamer shanks	Art. no.
Reamer shank ZIMMER	NF995
Reamer shank HARRIS	NF996
Reamer shank AO	NF997

With supports for:	Art. no.
One curved reamer shank	
Half module tray with supports for reamers ø 44 – 68 mm, one straight reamer shank and one protection sleeve	NT635R
465 x 118 x 45 mm	
Standard protection sleeve	FS974
OrthoPilot® Navigation sleeve	FS939

Lid JH217R 489 x 257 mm	Recommended container JK440 592 x 274 x 90 mm Lid JK489
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Note

Please order all reamer components separately.

AESCULAP® Reamers

Curved reamer drivers



Curved reamer shanks

Art. no.

ENZTEC MIOS® reamer shank HARRIS ENZTEC-4250-7105

ENZTEC MIOS® reamer shank AO-PROTEK ENZTEC-4250-7090

Tray NT633R

With supports for:

Art. no.

One curved reamer shank ENZTEC



Curved reamer shanks

Art. no.

HPF MIOS® reamer shank HARRIS HPF-H0032102099

HPF MIOS® reamer shank AO-PROTEK HPF-H0032101499

Tray NT634R

With supports for:

Art. no.

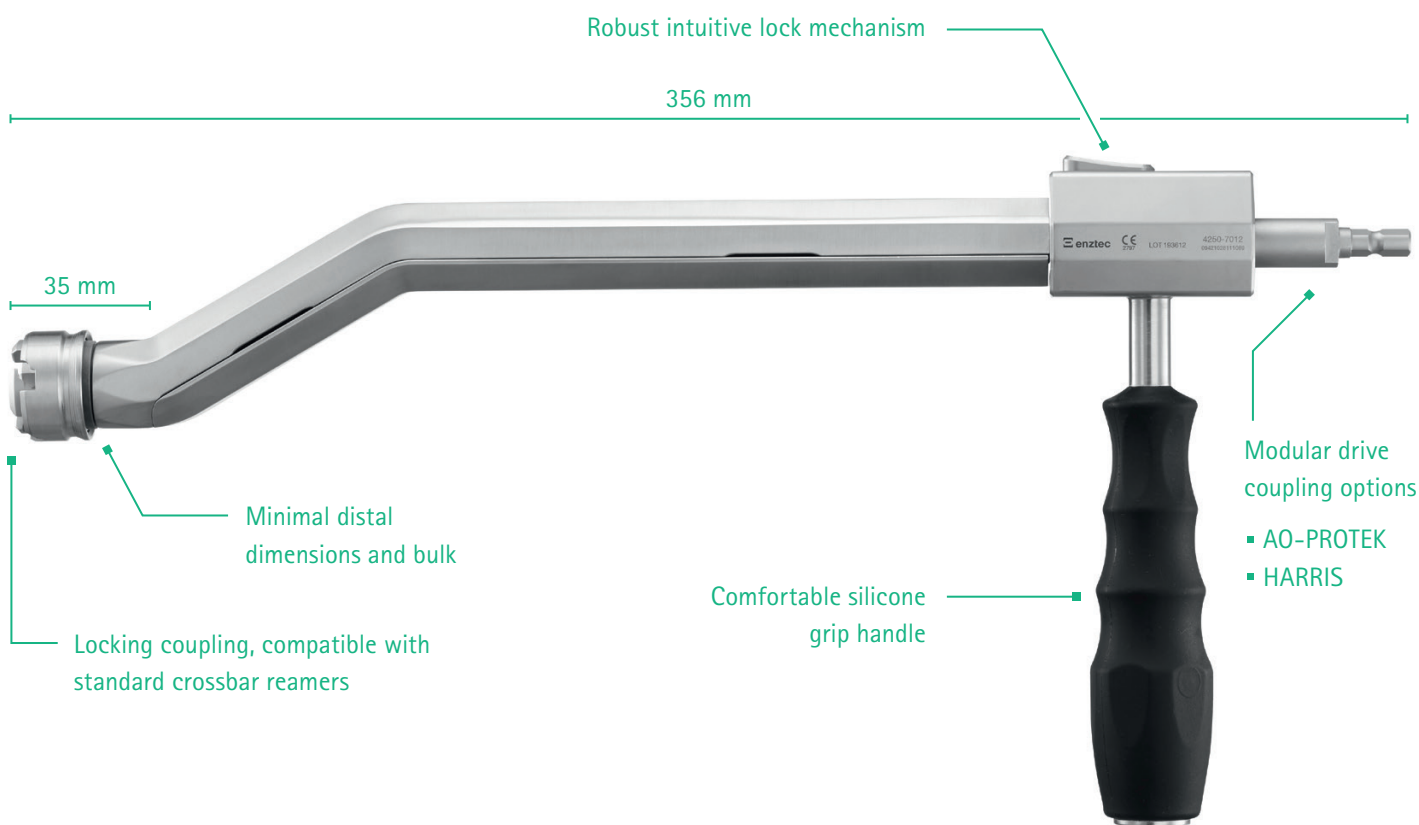
One curved reamer shank HPF

Note

Please order all reamer components separately.

AESCULAP® Reamers

ENZTEC MIOS® reamer shank



ENZTEC Offset Reamer Driver – Locking

The Locking Offset Reamer Driver supports MIS approaches to the hip joint, also Direct Anterior Approach. The reamer driver is compatible with standard crossbar reamers available in the AESCULAP® portfolio.

Features:

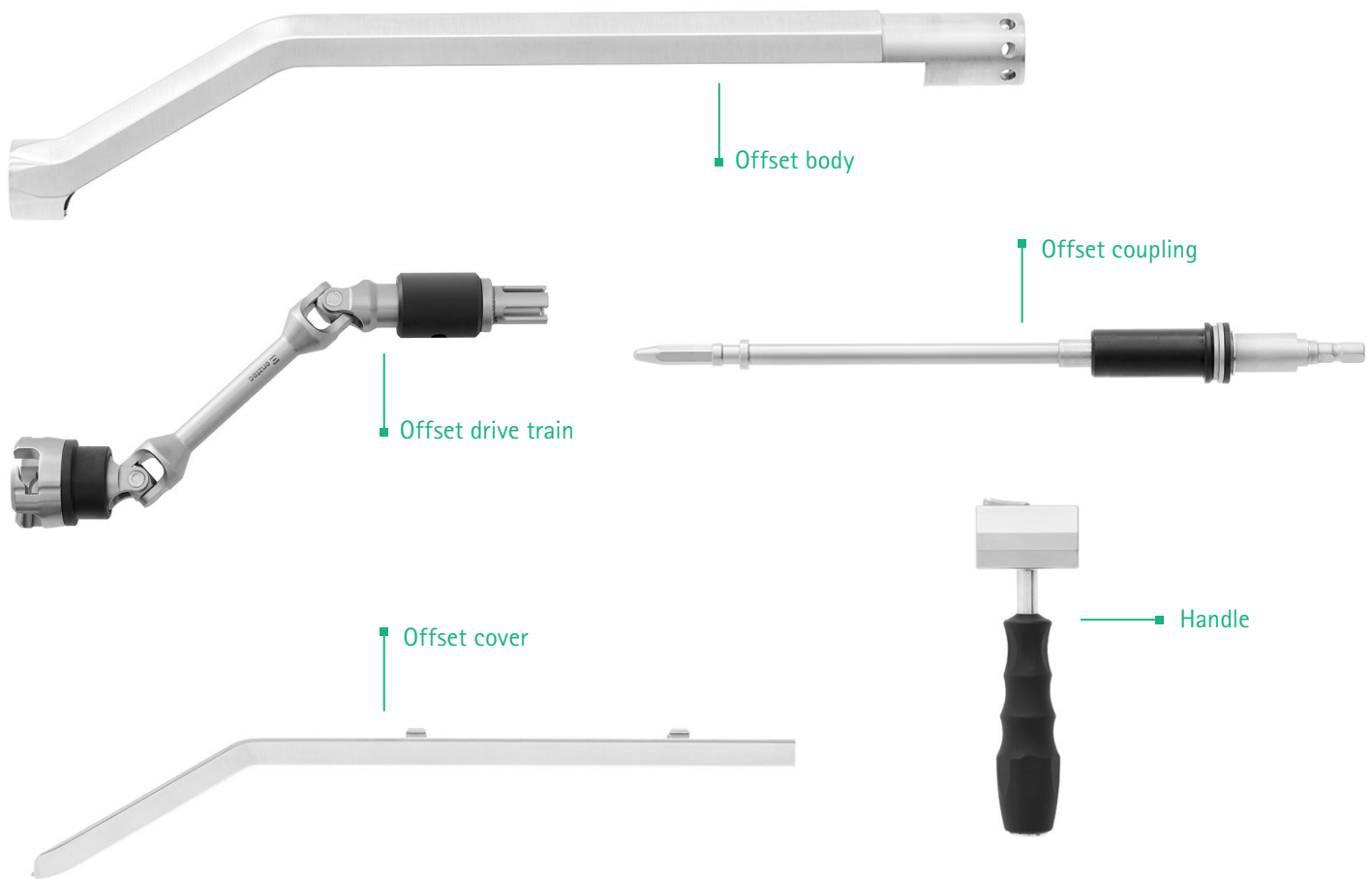
- Traditional style capture retains the reamer to allow forward and reverse reaming
- Index-able handle (45° increments)
- Offset Coupling is available with HARRIS or AO-PROTEK connection
- Disassembles for easy cleaning in 5 parts
- Replaceable parts, including drive train → all parts are inter-changeable, replacement parts on the following page
- Intuitive assembly

Order Information:

Curved reamer shanks	Art. no.
ENZTEC MIOS® reamer shank HARRIS	ENZTEC-4250-7105
ENZTEC MIOS® reamer shank AO-PROTEK	ENZTEC-4250-7090
Tray for module ENZTEC reamer shank	NT633R

AESCULAP® Reamers

ENZTEC replacement parts

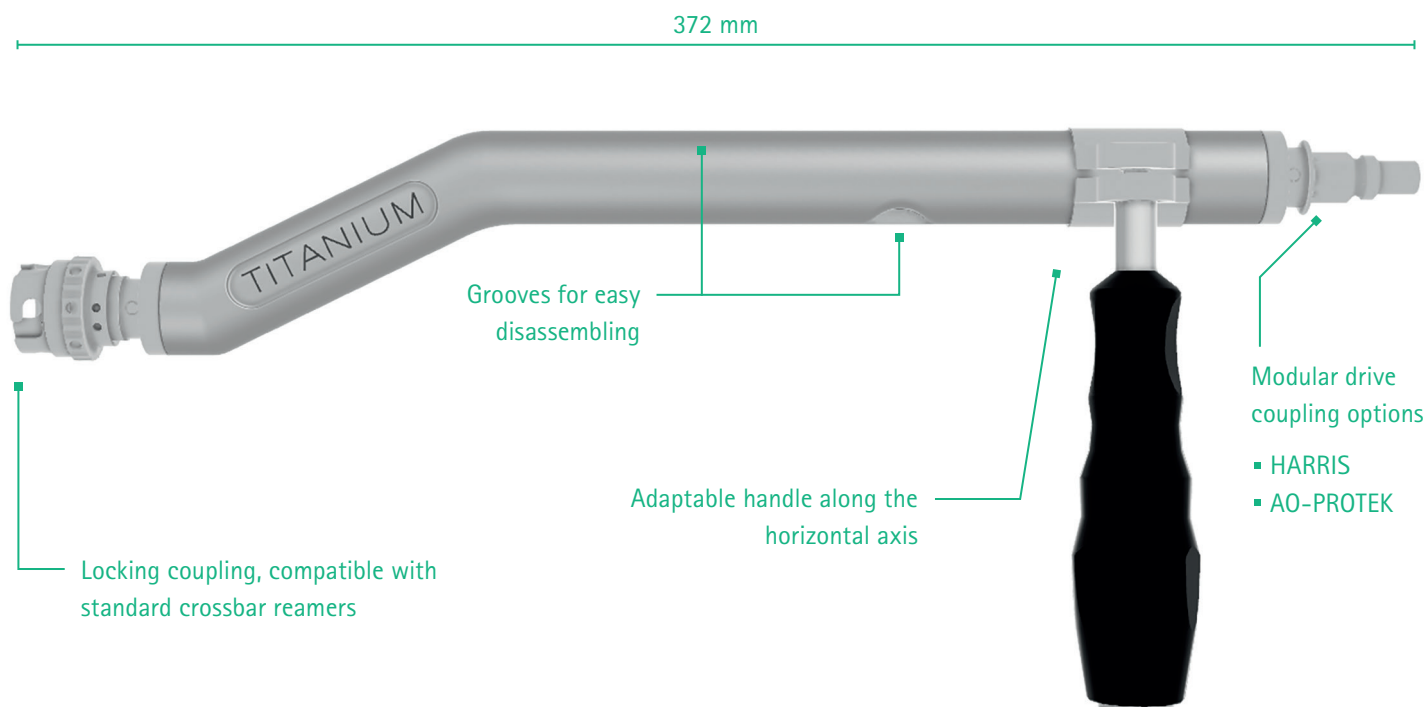


Replacement Parts

Description AAG - EN	Art. no.
ENZTEC offset cover for MIOS® reamer shank	ENZTEC-4250-7031
ENZTEC handle for MIOS® reamer shank	ENZTEC-4250-7012
ENZTEC drive train for MIOS® reamer shank	ENZTEC-4250-7036
ENZTEC AO-PROTEK coupling for MIOS® reamer shank	ENZTEC-4250-7034
ENZTEC HARRIS coupling for MIOS® reamer shank	ENZTEC-4250-7047

AESFULAP® Reamers

HPF MIOS® reamer shank



HPF Offset Reamer Driver

The Locking Offset Reamer Driver supports MIS approaches to the hip joint, also Direct Anterior Approach. The reamer driver is compatible with standard crossbar reamers available in the AESFULAP® portfolio.

Features:

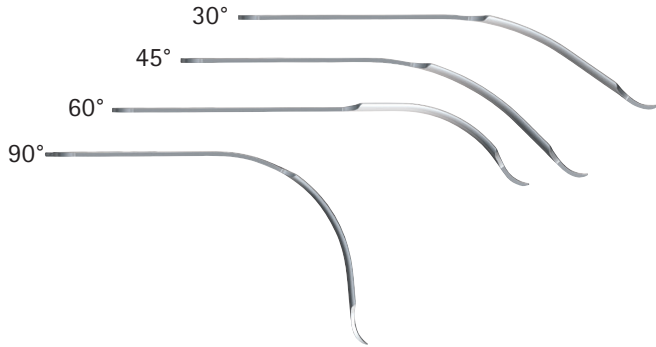
- Flexible adaption of the handle along the horizontal axis of the shaft
- Coupling is available with HARRIS or AO-PROTEK connection
- Disassembles in 4 parts
- Grooves for easy disassembling

Order Information:

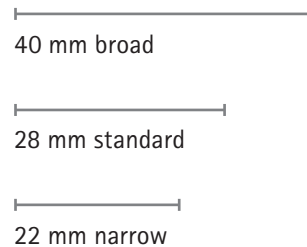
Curved reamer shanks	Art. no.
HPF MIOS® reamer shank HARRIS	HPF-H0032102099
HPF MIOS® reamer shank AO-PROTEK	HPF-H0032101499
Tray for module HPF reamer shank	NT634R

Minimally Invasive Orthopaedic Solutions

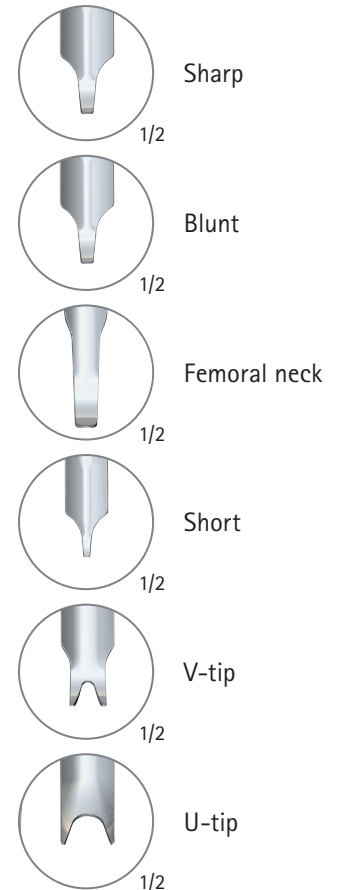
Angle



Width



Tip



Art. no.	Angle	Width	Tip	Use
FK211R	90°	Narrow 22 mm	Sharp	Acetabular rim
FK212R	90°	Standard 28 mm	Sharp	Acetabular rim
FK213R	90°	Broad 40 mm	Sharp	Acetabular rim*
FK214R	90°	Narrow 22 mm	Short	Acetabular rim for capsule preservation
FK215R	90°	Standard 28 mm	Short	Acetabular rim
FK218R	90°	Standard 28 mm	Blunt	Acetabular rim
FK219R	90°	Broad 40 mm	Blunt	Acetabular rim*
FK221R	30°	Standard 28 mm	V-tip	Greater trochanter
FK222R	45°	Standard 28 mm	V-tip	Greater trochanter
FK223R	60°	Standard 28 mm	V-tip	Posterior acetabular rim
FK224R	90°	Standard 28 mm	V-tip	Acetabular rim
FK243R	45°	Standard 28 mm	Sharp	Universal use*
FK244R	45°	Standard 28 mm	Blunt	Universal use*
FK245R	45°	Broad 40 mm	Sharp	Acetabular rim*
FK246R	45°	Broad 40 mm	Blunt	Acetabular rim*
FK231R	30°	Standard 28 mm	U-tip	Lesser trochanter
FK241R	30°	Narrow 22 mm	Sharp	Greater trochanter
FK238R	30°	Narrow 22 mm	Femoral neck	Femoral exposure/osteotomy protection
FK239R	90°	Narrow 22 mm	Femoral neck	Femoral exposure/osteotomy protection
FK248R	Straight	Retractor extension		
FK249R	60°	Retractor extension		

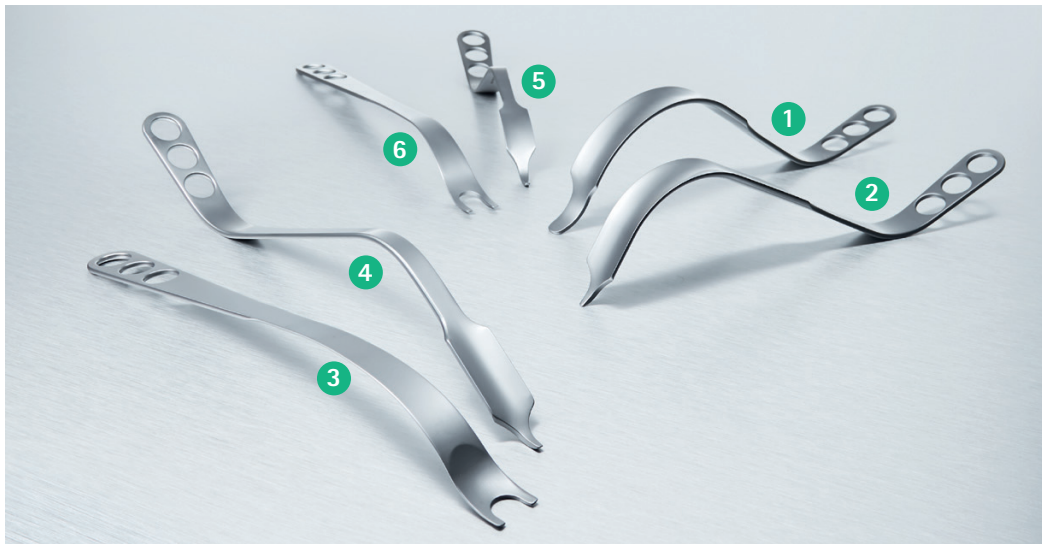
The instructions for the surgical use of the MIOS® hip retractors are not binding.

The selection and position of the instruments depend on the patient's position, the surgical access, the incision direction and the patient's intraoperative soft tissue situation.

The decision regarding the selection and use of MIOS® hip retractors and their combination with other instruments is the responsibility of the surgeon.

* The use of broad and 45° curved retractors may be helpful in overweight patients.

Minimally Invasive Orthopaedic Solutions



- Direct anterior approach
- Femoral neck exposure
- Acetabular exposure
- Femoral elevation

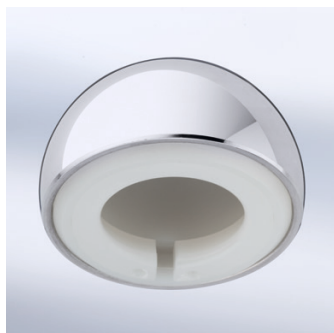
Art. no.	Code	Angle	Width		Tip	Use
FK237R	1	90°	Standard	28 mm	Femoral neck	Femoral neck Osteotomy protection
FK217R*	2	90°	Standard	28 mm	Sharp	Anterior / lateral acetabular rim Greater trochanter
FK230R	3	60°	Standard	28 mm	U-sharp	Posterior acetabular rim
FK247R**	4	60°	Standard	28 mm	Sharp	Medial acetabular rim Medial femur preparation
FK235R**	5	45°	Narrow	22 mm	Sharp	Medial acetabular rim
FK234R	6	30°	Standard	28 mm	Flat U-tip	Femoral elevation

* Two or three FK217Rs are generally used for acetabular exposure.

** Either FK247R or FK235R is used on the medial acetabular rim.

AESCULAP® Bipolar Cup

Hip endoprosthesis heads



- Self-centering with detachable locking ring
- Stable connection between the metal shell and polyethylene insert
- Outer shell made of implant steel or cobalt chromium
- Inner diameter 22.2 mm or 28 mm
- Outer diameter 39-60 mm

Bipolar Cup out of Implant steel

Outer diameter	Art. no. Inner diameter	
	ø 22.2 mm	ø 28 mm
ø 39 mm	NK019S	-
ø 40 mm	NK020S	-
ø 41 mm	NK021S	-
ø 42 mm	NK022S	-
ø 43 mm	NK023S	NK043S
ø 44 mm	NK024S	NK044S
ø 45 mm	NK025S	NK045S
ø 46 mm	NK026S	NK046S
ø 47 mm	NK027S	NK047S
ø 48 mm	NK028S	NK048S
ø 49 mm	NK029S	NK049S
ø 50 mm	NK030S	NK050S
ø 51 mm	NK031S	NK051S
ø 52 mm	NK032S	NK052S
ø 53 mm	NK033S	NK053S
ø 54 mm	NK034S	NK054S
ø 55 mm	NK035S	NK055S
ø 56 mm	-	-
ø 57 mm	-	-
ø 58 mm	-	-
ø 59 mm	-	-
ø 60 mm	-	-

Implant steel (ISO 5832-1) and UHMWPE (ISO 5834-2)

Bipolar Cup out of CoCr

Outer diameter	Art. no. Inner diameter	
	ø 22.2 mm	ø 28 mm
ø 39 mm	NK019K	-
ø 40 mm	NK020K	-
ø 41 mm	NK021K	-
ø 42 mm	NK022K	-
ø 43 mm	NK023K	-
ø 44 mm	NK024K	-
ø 45 mm	NK025K	-
ø 46 mm	NK026K	-
ø 47 mm	NK027K	NK047K
ø 48 mm	NK028K	NK048K
ø 49 mm	NK029K	NK049K
ø 50 mm	NK030K	NK050K
ø 51 mm	NK031K	NK051K
ø 52 mm	NK032K	NK052K
ø 53 mm	NK033K	NK053K
ø 54 mm	NK034K	NK054K
ø 55 mm	NK035K	NK055K
ø 56 mm	-	NK056K
ø 57 mm	-	NK057K
ø 58 mm	-	NK058K
ø 59 mm	-	NK059K
ø 60 mm	-	NK060K

CoCr (CoCrMo / ISO 5832-4) and UHMWPE (ISO 5834-2)

Trial heads

Outer diameter	Art. no.	Outer diameter	Art. no.
ø 39 mm	-	ø 50 mm	ND920
ø 40 mm	ND909	ø 51 mm	ND921
ø 41 mm	ND911	ø 52 mm	ND922
ø 42 mm	ND912	ø 53 mm	ND923
ø 43 mm	ND913	ø 54 mm	ND924
ø 44 mm	ND914	ø 55 mm	ND925
ø 45 mm	ND915	ø 56 mm	ND926
ø 46 mm	ND916	ø 57 mm	ND927
ø 47 mm	ND917	ø 58 mm	ND928
ø 48 mm	ND918	ø 59 mm	ND929
ø 49 mm	ND919	ø 60 mm	ND931

Tray NG031R
540 x 253 x 56 mm

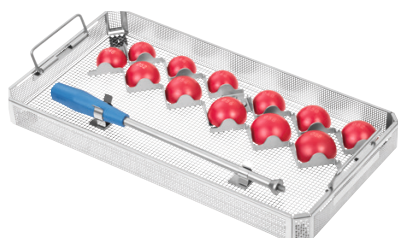
Trial Bipolar Cup

Outer diameter	Art. no.	
	Inner diameter ø 22.2 mm	ø 28 mm
ø 39 mm	NF719	-
ø 40 mm	NF720	-
ø 41 mm	NF721	-
ø 42 mm	NF722	-
ø 43 mm	NF723	NF743
ø 44 mm	NF724	NF744
ø 45 mm	NF725	NF745
ø 46 mm	NF726	NF746
ø 47 mm	NF727	NF747
ø 48 mm	NF728	NF748
ø 49 mm	NF729	NF749

Outer diameter	Art. no.	
	Inner diameter ø 22.2 mm	ø 28 mm
ø 50 mm	NF730	NF750
ø 51 mm	NF731	NF751
ø 52 mm	NF732	NF752
ø 53 mm	NF733	NF753
ø 54 mm	NF734	NF754
ø 55 mm	NF735	NF755
ø 56 mm	-	NF756*
ø 57 mm	-	NF757*
ø 58 mm	-	NF758*
ø 59 mm	-	NF759*
ø 60 mm	-	NF762*

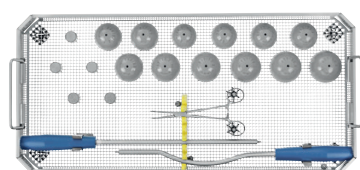
* Not included in set NF760.

Trial heads



Instruments	Art. no.
Tray 540 x 253 x 56 mm	NG031R*
Lid 544 x 257 mm	JF227R*
Insertion instrument, straight	ND170R*
Insertion instrument, curved	ND171R*

Bipolar Cup Trial Heads Ø 22.2 mm:



Instruments	Art. no.
Basket tray 540 x 253 x 56 mm	NF701R*
Basket lid 544 x 257 mm	JF227R*
Insertion instrument, straight	NF770R*
Insertion instrument, curved	NF771R*
Forceps for locking ring	ND930R*
Trial heads Ø 22.2 mm Size 39 mm to size 55 mm	NF719* to NF935*

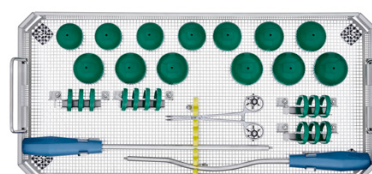
Other instruments	Art. no.
Locking ring for Trial Bipolar Cups (Ø 28 mm)	NF774*
Locking ring for Trial Bipolar Cups (Ø 22.2 mm)	NF773*

* Please order separately.

Note

ND930R must be used to tighten the locking ring.

Bipolar Cup Trial Heads Set Ø 28 mm NF760 consisting of:



Instruments	Art. no.
Tray 540 x 253 x 56 mm	NF761R
Lid 544 x 257 mm	JF227R
Packing stencil	TE618
Insertion instrument, straight	NF770R
Insertion instrument, curved	NF771R
Forceps for locking ring	ND930R
Trial head Ø 28 mm size 43 mm	NF743
Trial head Ø 28 mm size 44 mm	NF744
Trial head Ø 28 mm size 45 mm	NF745
Trial head Ø 28 mm size 46 mm	NF746
Trial head Ø 28 mm size 47 mm	NF747
Trial head Ø 28 mm size 48 mm	NF748
Trial head Ø 28 mm size 49 mm	NF749
Trial head Ø 28 mm size 50 mm	NF750
Trial head Ø 28 mm size 51 mm	NF751
Trial head Ø 28 mm size 52 mm	NF752
Trial head Ø 28 mm size 53 mm	NF753
Trial head Ø 28 mm size 54 mm	NF754
Trial head Ø 28 mm size 55 mm	NF755

AESCULAP® Bipolar Cup

Surgical Technique

1 | Preoperative planning

The Bipolar Cup is used for partial hip replacements that leave the acetabular structures intact. The Bipolar implant component is combined with a modular 28 mm prosthesis head, which is connected to the Bipolar Cup using a locking ring to prevent dislocation. Alternatively, Bipolar Cups for 22.2 mm prosthesis heads are also available. The detachable locking ring is used to fix the prosthesis head in place. The preoperative planning uses the opposite side as reference.

2 | Sizing

The Bipolar Cup implant diameter is sized intraoperatively using the trial cups which, like the implants, are available in 1 mm increments. If Bipolar trial heads are used, a trial reduction can also be performed.

3 | Trial reduction

The Bipolar Cup can be combined with trial prosthesis heads, which are connected to the Bipolar Cup using the locking ring. Alternatively, a trial reduction can be performed with a Bipolar Cup inserted in the acetabulum without a locking ring.

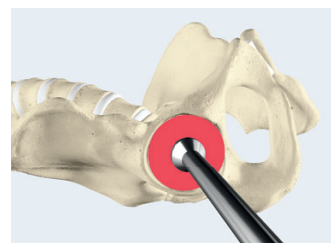
4 | Implantation

Remove the Bipolar Cup of the corresponding size from the sterile packaging. Remove the locking ring from the Bipolar Cup using the locking ring forceps ND930R. After determining the head neck length with trial prosthesis heads, place the locking ring over the taper of the stem before fitting the prosthesis head implant. The holes must point in the direction of the prosthesis stem. If necessary, the locking ring can be removed again using the locking ring forceps ND930R. In this case, make sure that the locking ring clicks into the Bipolar Cup and that it is in the correct position.

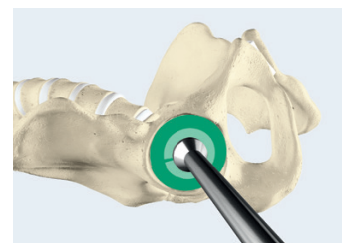
The joint reduction is then performed. The range of motion of the 28 mm head in the Bipolar Cup depends, among other things, on the hip stem's taper size. Extra long heads with collars significantly restrict the range of motion and should be avoided by positioning the prosthesis stem axially.



1 | Bipolar Cup with locking ring forceps



2 | Sizing with trial head



3 | Bipolar trial head with locking ring



4 | Correct position of the locking ring for implantation



AESCULAP® Reconstruction Ring

Acetabular reconstruction shell



- Acetabular roof shell
- Anatomical geometry to reinforce the bony acetabular bed in the loading area
- Diameter 52–64 mm
- Fixation of the appropriate polyethylene cup in bone cement

Reconstruction ring

Outer diameter (inner diameter)	Art. no. right	Art. no. left
ø 52 (48) mm	NH212T	NH222T
ø 58 (54) mm	NH233T	NH243T
ø 64 (60) mm	NH254T	NH264T

Pure titanium acc. to ISO 5832-2

Recommended polyethylene cup

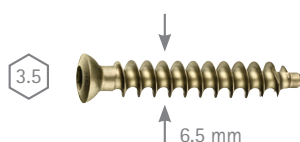
Outer diameter	Art. no. Inner diameter	
	ø 28 mm	ø 32 mm
ø 46 mm	NK846	NK946
ø 52 mm	NK852	NK952
ø 58 mm	NK858	NK958

UHMWPE

Ultra-high-molecular-weight polyethylene (ISO 5834-2)

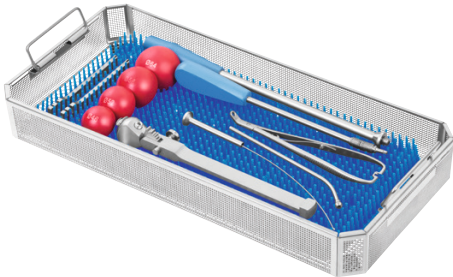
Anchoring screws

Length	Art. no.
16 mm	NA766T
20 mm	NA770T
24 mm	NA774T
28 mm	NA778T
32 mm	NA782T
36 mm	NA786T
40 mm	NA790T



Length	Art. no.
44 mm	NA794T
48 mm	NA798T
52 mm	NA802T
56 mm	NA806T
60 mm	NA810T
64 mm	NA814T
68 mm	NA818T

Ti6Al4V Titanium forged alloy
(Ti6Al4V/ISO 5832-3)



Please order instruments separately:		Art. no.
Impactor		NG338R
Cup insertion and pressing instrument straight		ND170R
Trial cup	∅ 48 mm	NF908
	∅ 52 mm	NF912
	∅ 58 mm	NF918
	∅ 64 mm	NF924
2 x bending lever		LS207R
Cardan screwdriver SW 3.5		NT428R
Screw holding forceps, straight		NT432R
Depth gauge		NT427R
Drill ∅ 3.2 mm with AO shank		GC319R
Lambotte osteotome, straight 8 mm width, 245 mm length		FL651R
Cottle osteotome, straight, 8 mm width, 180 mm length		OL298R

X-ray template NG340

Silicone positioning mat JF932
470 x 230 x 30 mm

Tray JF212R
485 x 253 x 56 mm

Lid JF217R
489 x 257 mm

Recommended container JK440
592 x 274 x 90 mm

Container lid JK489

AESCULAP® Reconstruction Ring

Surgical Technique

1 | Preoperative planning

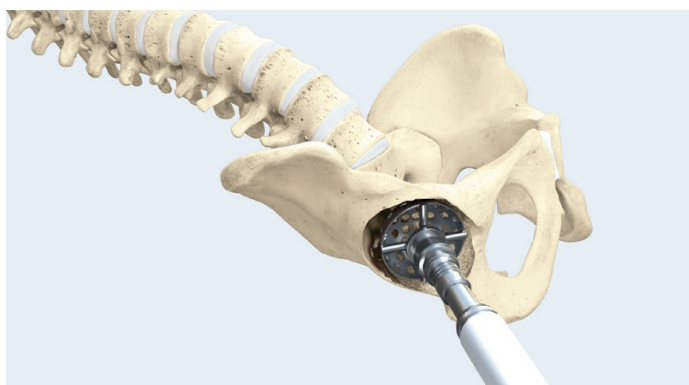
X-ray templates with a magnification of 115% and digital X-ray templates are available.

2 | Preparation of the acetabulum

In case of primary hip replacements or after previous endoprosthetic treatment with corresponding acetabular bone defect, an implantation with reconstruction ring can be performed.

The loosened acetabular component and, if necessary, the bone cement are removed.

If necessary, carefully remove granulation tissue and slightly expand and freshen the bone bed with spherical reamers in ascending size. Depending on the bone bed and defect situation, bone replacement material can be used as a filler. Before inserting the implant, a trial cup is used to determine the size of the reconstruction ring. The trial cups can also be used to compact bone replacement material.



2 | Freshening the acetabulum with reamers and sizing

3 | Implantation

The reconstruction ring is labeled for the left or right hip joint.

The angle of the reconstruction ring's cranial anchoring flaps can be adjusted using bending levers. The lower caudal anchoring tip is adapted to the bone structure of the os ischii. Avoid repeated, alternating bending of the anchoring flaps.



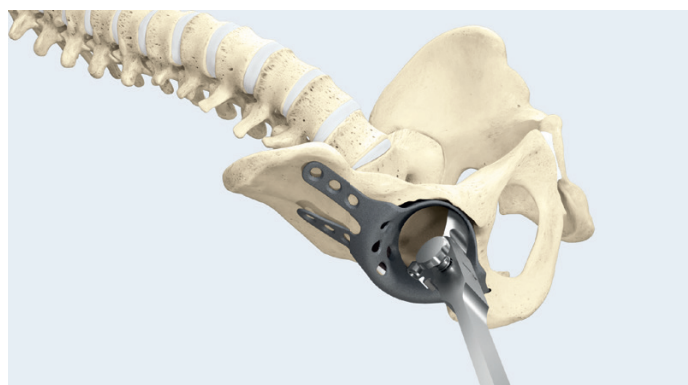
3 | Adjustment of the reconstruction ring with bending levers

Insert the insertion instrument into the central opening of the reconstruction ring and screw the tensioning screw into the caudal opening.



3 | Os ischii osteotomy

Then prepare the os ischii with an osteotome so that the caudal flap can be inserted. The cranial flaps can then be fixed in place.

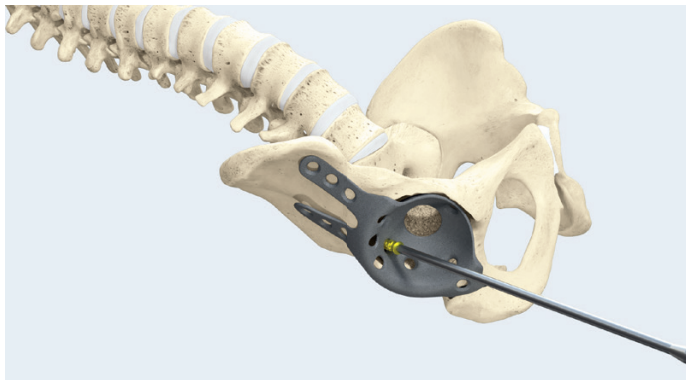


3 | Insertion of the reconstruction ring with insertion instrument

4 | Screw fixation

The acetabular reconstruction ring is fixed to the bone bed using anchoring screws. The screws are positioned working from the caudal region to the cranial region.

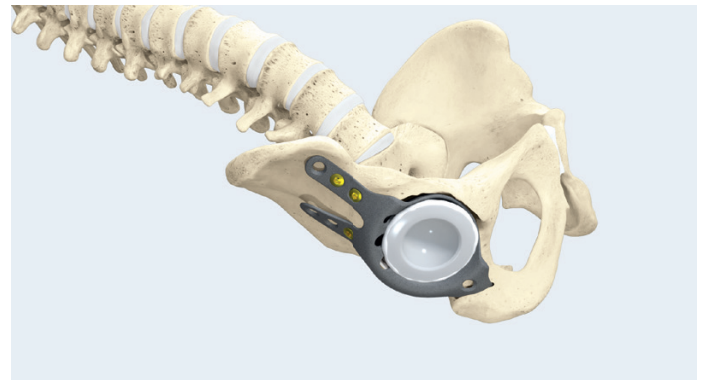
The screw holes are drilled using a flexible Ø 3.2 mm drill, or a Ø 4.0 mm drill in the case of heavily sclerotized bone. After measuring the required screw length with the depth gauge, screw holding forceps make it easier to hold the screws while tightening them with a cardan screwdriver. To complete the screw fixation, tighten all the screws carefully.



4 | Positioning and fixation of the screws

5 | Implantation of polyethylene cup

The polyethylene cup is fixed in place using bone cement. Prepare and apply the bone cement as described in the cement manufacturer's instructions for use. Select a cemented polyethylene cup that is 2 mm smaller than the inner size of the reconstruction ring and implant it according to the corresponding surgical technique and instructions for use. It is important to ensure that the diameter of PE cups and prosthesis heads, as well as the taper size of prosthesis stems and prosthesis heads, match.



5 | Implantation of the PE cup

AESCULAP® Flat Profile Acetabular Cups

Cemented polyethylene acetabular cups



- Flat profile PE cups made of UHMWPE or Vitelene®
- Inner diameter 22.2 mm, 28 mm, 32 mm or 36 mm
- Outer diameter 40–64 mm

Cemented PE cups – Flat profile standard

Size	Art. no. Inner diameter		
	ø 22.2 mm	ø 28 mm	ø 32 mm
40 mm	NK810	-	-
42 mm	NK812	NK842	-
44 mm	-	NK844	-
46 mm	-	NK846	NK946
48 mm	-	NK848	NK948
50 mm	-	NK850	NK950
52 mm	-	NK852	NK952
54 mm	-	NK854	NK954
56 mm	-	NK856	NK956
58 mm	-	NK858	NK958
60 mm	-	NK870	NK960
62 mm	-	NK872	NK962
64 mm	-	NK874	NK964

UHMWPE

Ultra-high-molecular-weight polyethylene
(ISO 5834-2)

Cemented Vitelene® PE cups – Flat profile standard

Size	Art. no. Inner diameter		
	ø 28 mm	ø 32 mm	ø 36 mm
40 mm	-	-	-
42 mm	NK842E	-	-
44 mm	NK844E	-	-
46 mm	NK846E	NK946E	-
48 mm	-	NK948E	-
50 mm	-	NK950E	NK976E
52 mm	-	NK952E	NK977E
54 mm	-	NK954E	NK978E
56 mm	-	NK956E	NK979E
58 mm	-	NK958E	NK980E
60 mm	-	NK960E	NK981E
62 mm	-	NK962E	NK982E
64 mm	-	NK964E	NK983E

Vitelene®

UHMWPE-XE Vitamin E stabilized
highly crosslinked polyethylene

AESCULAP® Full Profile / Isofar Cups

Cemented acetabular polyethylene cups



- With and without snap-in mechanism
- Inner diameter 28 mm or 32 mm
- Outer diameter 46–62 mm

Cemented full profile PE cups – with snap fit

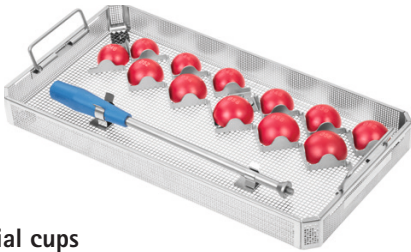
Size	Art. no. Inner diameter	
	ø 28 mm	ø 32 mm
40 mm	-	-
42 mm	-	-
44 mm	-	-
46 mm	NH947	-
48 mm	NH949	NH969
50 mm	NH951	NH971
52 mm	NH953	NH973
54 mm	NH955	NH975
56 mm	NH957	NH977
58 mm	NH959	NH979
60 mm	NH961	NH981
62 mm	NH963	NH983
64 mm	-	-

UHMWPE
Ultra-high-molecular-weight polyethylene
(ISO 5834-2)

Cemented full profile PE cups – without snap fit

Art. no. Inner diameter	
ø 28 mm	ø 32 mm
-	-
-	-
-	-
NH946	-
NH948	NH968
-	NH970
-	NH972
-	NH974
-	NH976
-	NH978
-	NH980
-	NH982
-	-

UHMWPE
Ultra-high-molecular-weight polyethylene (ISO 5834-2)



Trial cups

Outer diameter	Art. no.
ø 42 mm	NF902
ø 44 mm	NF904
ø 46 mm	NF906
ø 48 mm	NF908
ø 50 mm	NF910
ø 52 mm	NF912
ø 54 mm	NF914
ø 56 mm	NF916
ø 58 mm	NF918
ø 60 mm	NF920
ø 62 mm	NF922
ø 64 mm	NF924

Cup pressing heads



Inner diameter	Art. no. without rim	Art. no. with rim
ø 22.2 mm	ND178	NF130
ø 28 mm	ND174	NF131
ø 32 mm	ND172	NF132
ø 36 mm	ND166	NF133

Note

Instruments must be ordered separately.

X-ray template NK970

Tray NG031R

540 x 253 x 56 mm

Lid JF227R

544 x 257 mm

Insertion instrument, straight* ND170R

Insertion instrument, curved* ND171R

Recommended container JK440

592 x 274 x 90 mm

Container lid JK489

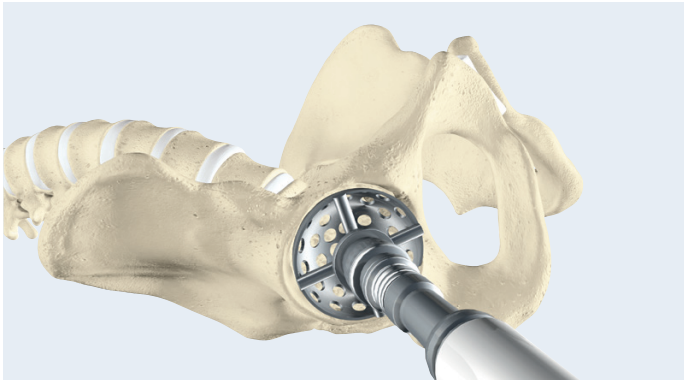
* One storage place in the basket.

Surgical Technique

1 | Preoperative planning

X-ray templates with a magnification of 115 are available.

2 | Preparation of the acetabulum



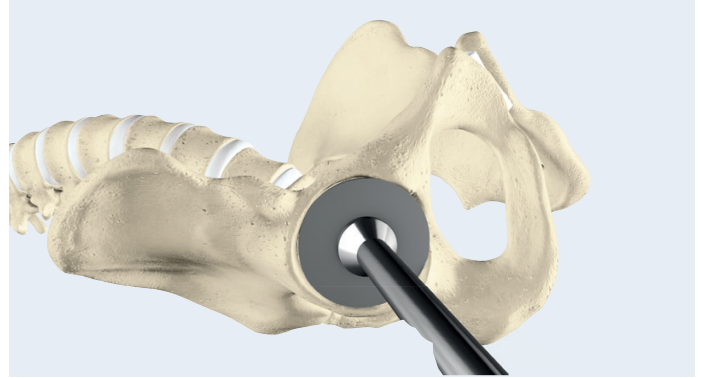
Acetabular exposure and the removal of articular cartilage and non-load bearing osteophytes are required for proper preparation of the acetabulum. This is done using spherical reamers driven by a low-speed motor handpiece. During the reaming process, all cartilage must be removed down to the subchondral bone until bleeding occurs.

With the exception of dysplastic hips, care must be taken not to medialize the center of joint rotation unnecessarily through the application of axial pressure to the reamer, but instead to prepare the rim of the cup for an adequate bony anchor surface.

In the case of dysplastic changes, a cup position in the primary cup region is recommended if a shortening of the leg can be compensated for. The caudal rim should be at the level of the pelvic teardrop. To ensure adequate cranial roofing, the acetabular bottom is deepened and, if necessary, an acetabular roof graft is performed in advance.

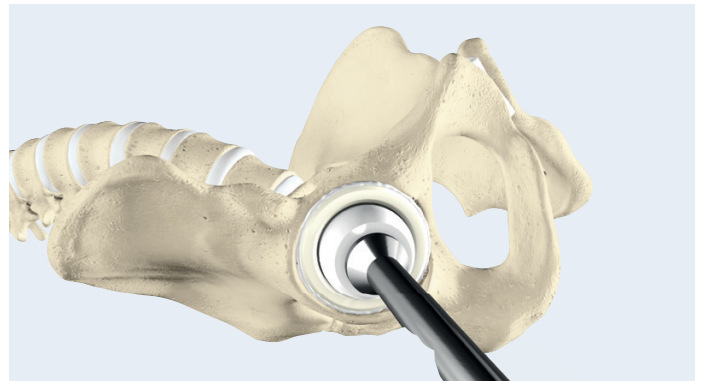
After appropriate preparation of the implant bed, the desired cement mantle thickness should be taken into account. To obtain a cement mantle of min. 1 mm, the reamer selected should be 2 mm larger than the final implant.

3 | Insertion of the trial cup



The nominal size of the PE cup corresponds to the nominal diameter and should therefore be 2 mm smaller than the last acetabular reamer used. For the implantation of the acetabular PE cup, a straight as well as a curved insertion instrument for minimal invasive approach are available.

4 | Implantation



After the exposure of the pelvis and reaming steps have been completed, the selected acetabular PE cup is implanted. The use of the bone cement depends on the relevant instructions for use and the bone cement application system used. Once the bone cement has been applied to the acetabulum, the PE cup is implanted. The cup pressing head is selected according to the joint diameter and fixed to the insertion instrument. The excess bone cement should be removed as much as possible. Once the cement has completely hardened, joint stability can be checked.

Ceramic Hip Endoprosthesis Heads



- Modular prosthesis heads for ceramic-polyethylene articulations
- To be used in combination with Vitelene® or standard polyethylene
- No compatibility with ceramic cup inserts
- Diameter 28 mm, 32 mm and 36 mm with 12/14 taper

Isocer® Ceramic Prosthesis Head

Neck length	Art. no.				
	ø 22.2 mm	ø 28 mm	ø 32 mm	ø 36 mm	ø 40 mm
S	-	NK324	NK424	NK524	-
M	-	NK325	NK425	NK525	-
L	-	NK326	NK426	NK526	-
XL	-	-	NK427	NK527	-

Isocer® Zirconia-toughened alumina ceramic (Al₂O₃/ZrO₂/ISO 6474-2)

Ceramic Hip Endoprosthesis Heads



- Modular prosthesis heads for ceramic-ceramic and ceramic-PE articulations
- Use in combination with BioloX®, Vitelene® or standard polyethylene
- Diameter 28 mm, 32 mm, 36 mm and 40 mm with 12/14 taper

BioloX® delta Ceramic Prosthesis Head

Neck length	Art. no.				
	ø 22.2 mm	ø 28 mm	ø 32 mm	ø 36 mm	ø 40 mm
S	-	NK460D	NK560D	NK650D	NK750D
M	-	NK461D	NK561D	NK651D	NK751D
L	-	NK462D	NK562D	NK652D	NK752D
XL	-	-	NK563D	NK653D	NK753D

BioloX® delta Aluminum oxide matrix ceramic (Al₂O₃/ZrO₂/ISO 6474-2)

BioloX® Option Revision Heads



	28 mm	32 mm	36 mm
S	NK435	NK535	NK635
M	NK436	NK536	NK636
L	NK437	NK537	NK637
XL	NK438	NK538	NK638

Note

BioloX® Option Revision Heads are delivered with a 12/14 taper sleeve. For the 8/10 taper, please order additionally the taper sleeves listed below.

BioloX® delta Aluminum oxide matrix ceramic (Al₂O₃/ZrO₂/ISO 6474-2) with Ti6Al4V sleeve

Taper sleeves 8/10 for BioloX® Option Revision Heads



Neck length	S	M	L	XL
	NJ435T	NJ436T	NJ437T	NJ438T
Ti6Al4V				

Note

For use in revision surgeries with fixed stem with existing taper.

CoCr Hip Endoprosthesis Heads 12 / 14



- Modular prosthesis heads for metal-PE articulations
- To be used in combination with Vitelene® or standard polyethylene
- Diameter 22.2 mm, 28 mm, 32 mm, 36 mm, 40 mm with 12 / 14 taper

CoCr Prosthesis Head

	22.2 mm	28 mm	32 mm	36 mm	40 mm	22.2 mm	28 mm	≥ 32 mm
S	-	NK429K	NK529K	NK669K	NK769K	-	- 3.5 mm	- 4.0 mm
M	NK330K	NK430K	NK530K	NK670K	NK770K	± 0 mm	± 0 mm	± 0 mm
L	NK331K	NK431K	NK531K	NK671K	NK771K	+ 4.0 mm	+ 3.5 mm	+ 4.0 mm
XL	-	NK432K	NK532K	NK672K	NK772K	-	+ 7.0 mm	+ 8.0 mm
XXL	-	NK433K	NK533K	NK673K	NK773K	-	+ 10.5 mm	+ 12.0 mm

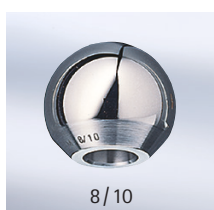
Cobalt-chromium forged alloy (CoCrMo/ISO 5832-12)

Relative neck lengths
for modular heads 12 / 14.

Hip Endoprosthesis Heads 8/10



- Modular ceramic prosthesis heads for ceramic-ceramic and ceramic-PE articulations
- To be used in combination with Biolox®, Vitelene® or standard polyethylene
- Diameter 28 mm, 32 mm and 36 mm with 8/10 taper, for Biolox® forte only diameter 22.2 mm with 8/10 taper



- Modular metal prosthesis heads for metal-PE articulations
- To be used in combination with Vitelene® or standard polyethylene
- Diameter 22.2 mm, 28 mm, 32 mm and 36 mm with 8/10 taper

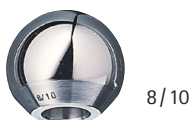


	28 mm	32 mm	36 mm
S	NJ101D	NJ106D	NJ116D
M	NJ102D	NJ107D	NJ117D
L	NJ103D	NJ108D	NJ118D
XL	-	-	NJ119D

	22.2 mm	28 mm	32 mm
S	NJ081	-	-
M	NJ082	-	-
L	-	-	-
XL	-	-	-

Biolox® delta
Aluminum oxide matrix ceramic (Al₂O₃/ZrO₂/ISO 6474-2)

Biolox® forte (Al₂O₃/ISO 6474-1)



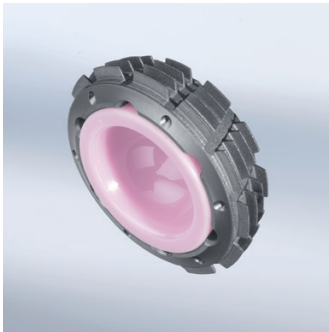
	22.2 mm	28 mm	32 mm	36 mm	40 mm	22.2 mm	28 mm	≥ 32 mm
S	NJ111K	NJ131K	NJ126K	NJ136K	-	- 3.5 mm	- 3.5 mm	- 3.5 mm
M	NJ112K	NJ132K	NJ127K	NJ137K	-	± 0 mm	± 0 mm	± 0 mm
L	NJ113K	NJ133K	NJ128K	NJ138K	-	+ 3.5 mm	+ 3.5 mm	+ 3.5 mm
XL	-	NJ134K	NJ129K	NJ139K	-	-	+ 7.0 mm	+ 7.0 mm
XXL	-	NJ135K	NJ130K	NJ140K	-	-	+ 10.5 mm	+ 10.5 mm

Cobalt-chromium forged alloy (CoCrMo/ISO 5832-12)

Relative neck lengths modular heads 8/10.

AESCULAP® Screw Cup SC

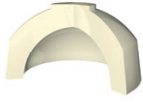
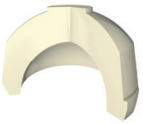
Cementless screw cup system



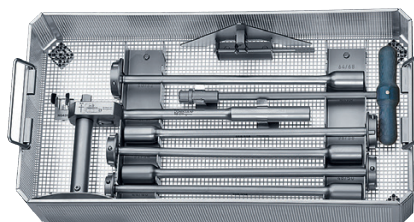
- Modular cementless screw cup system
- Use of Vitelene® inserts
- Cup outer diameter 44-68 mm
- Articulation diameter 28 mm, 32 mm and 36 mm



Screw Cup SC implants

Ø	Art. no.			44 mm 46 mm	48 mm 50 mm	52 mm 54 mm	56 mm 58 mm	60 mm	64 mm 68 mm
44 mm	NH444T	 Vitelene® sym- metrical	Ø 28 mm	NH191E	-	-	-	-	-
46 mm	NH446T		Ø 32 mm	-	NH202E	NH203E	NH204E	NH205E	NH206E
48 mm	NH448T		Ø 36 mm	-	-	-	NH209E	NH210E	NH211E
50 mm	NH450T	 Vitelene® with shoulder	Ø 28 mm	NH401E	NH402E	-	-	-	-
52 mm	NH452T		Ø 32 mm	-	-	NH413E	NH414E	NH415E	NH416E
54 mm	NH454T								
56 mm	NH456T								
58 mm	NH458T								
60 mm	NH460T								
64 mm	NH464T								
68 mm	NH468T								

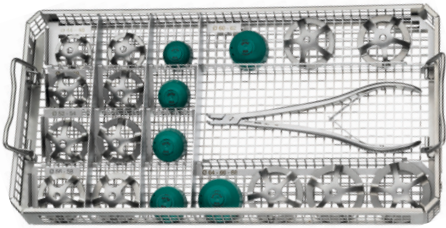
Vitelene® UHMWPE-XE Vitamin E stabilized highly crosslinked polyethylene



Ti6Al4V Titanium
forged alloy
(Ti6Al4V/ISO 5832-3)

Basic instruments

Consisting of:	Size	Art. no.	Consisting of:	Art. no.
Insertion instrument	44/46	NG521R	Lid insertion instrument	NG530R
Insertion instrument	48/50	NG522R	Ratchet	ND310R
Insertion instrument	52/54	NG523R	Aiming device 45° / 12.5°	NF277R
Insertion instrument	56/58	NG524R	Screw Cup SC X-ray templates	NG535
Insertion instrument	60/62	NG525R	Scale 1.15:1	
Insertion instrument	64 / 68	NG526R		



Trial components

Diameter	Art. no.	Diameter	Art. no.
ø 44 mm	NG944R	ø 58 mm	NG958R
ø 46 mm	NG946R	ø 60 mm	NG960R
ø 48 mm	NG948R	ø 62 mm	NG962R
ø 50 mm	NG950R	ø 64 mm	NG964R
ø 52 mm	NG952R	ø 66 mm	NG966R
ø 54 mm	NG954R	ø 68 mm	NG968R
ø 56 mm	NG956R		

Content	Art. no.
Forceps for removing trial inserts	NG437R

Trial inserts	Art. No. symmetrical			Art. No. with shoulder	
	ø 28 mm	ø 32 mm	ø 36 mm	ø 28 mm	ø 32 mm
ø 44/46 mm	NG391	-	-	NG641	-
ø 48/50 mm	-	NG502	-	NG642	-
ø 52/54 mm	-	NG503	-	NG643	NG513
ø 56/58 mm	-	-	NG509	NG644	NG514
ø 60/62 mm	-	-	NG510	NG645	NG515
ø 64-68 mm	-	-	NG511	NG646	NG516

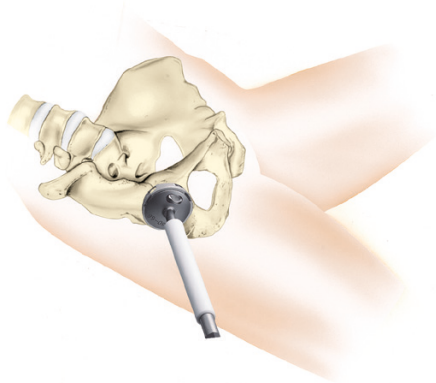
Surgical Technique

1 | Preoperative planning

X-ray templates with a magnification of 115% are available.

2 | Preparation of the acetabulum

Acetabular exposure and the removal of articular cartilage and non-load bearing osteophytes are required for the proper preparation of the acetabulum. This is done using spherical reamers of increasing size, which are driven by a low-speed motor handpiece. During the reaming process, all cartilage must be removed down to the subchondral bone until bleeding occurs.

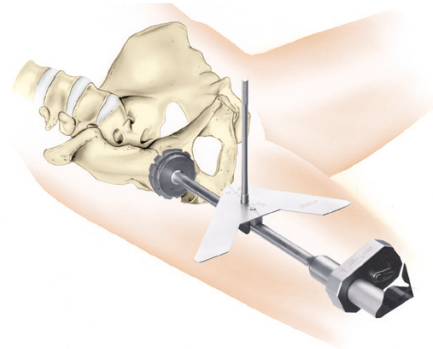


2 | Reaming of the acetabulum

3 | Implantation of the Screw Cup SC

A Screw Cup SC corresponding to the last reamer size is positioned on the corresponding insertion instrument and the ratchet is attached. An aiming device can be attached to the insertion instrument to check the position of the screw cup.

This ensures that the screw cup is implanted with approximately an acetabular inclination of 45° in the frontal plane and 12.5° in the anteversion position. During the insertion procedure, the aiming device is removed or held by the assistant. When the final incision depth has been reached, the Screw Cup SC will show a clear and noticeable increase in the insertion torque.



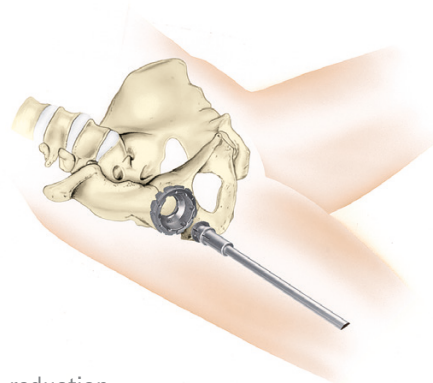
3 | Implantation of the Screw Cup

4 | Cancellous bone structure and cup lid

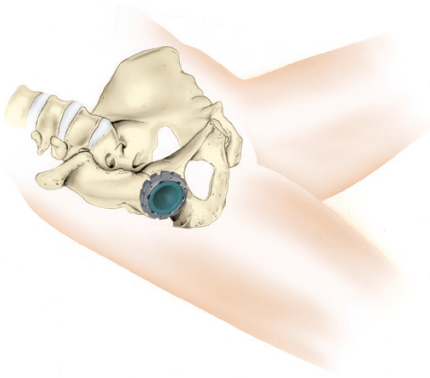
After the screw cup has been implanted, the bottom of the acetabulum can be filled with cancellous bone. The screw cup opening is closed with the enclosed plug. To do this, the plug is firmly fixed in place with the plug insertion instrument. The plug contact area is then cleaned by rinsing. The plug is firmly connected to the screw cup by turning it clockwise.

5 | Trial reduction

After implantation of the Screw Cup SC and before the preparation of the femoral stem, a trial liner is inserted for intraoperative checking of the muscle tension, joint mobility and joint function. After implantation of the prosthesis stem, a trial reduction is performed and the cup insert is selected to ensure free joint mobility and no subluxation position.



5 | Trial reduction



5 | Trial reduction

6 | Insertion of the liner

After the trial reduction and removal of the trial implant, the inner area of the Screw Cup SC is cleaned and dried before the liner is inserted. When inserting the liner, it is necessary to ensure that no bone or tissue residues remain in the conical clamping area.

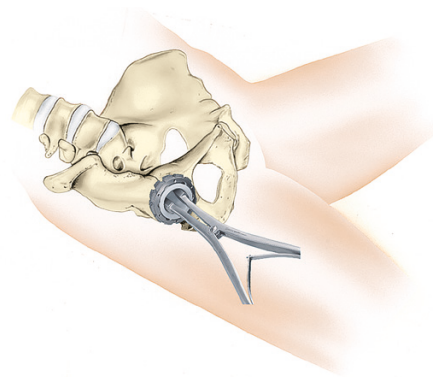
The liner is inserted by hand. The liner must not be tilted during insertion. The position of the liner is checked intraoperatively by feeling the inner rim of the cup and corrected, if necessary. The rims of the liner and the Screw Cup SC are flush with one another. In a tilted position, the inlay protrudes clearly (approx. 2 – 4 mm) in one place.

Only after this test can the inlay be fixed in place using the cup pressing instrument with plastic head that is provided for this purpose.

7 | Removing a polyethylene liner

A polyethylene liner can be levered out with an osteotome, or pushed or pulled out with a bone screw.

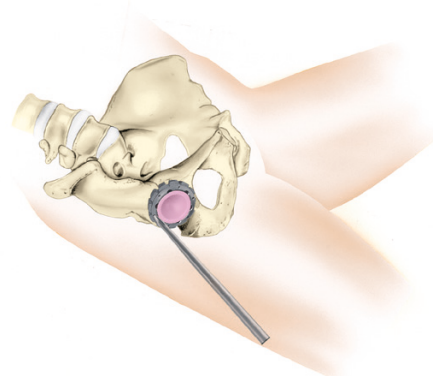
The liner is destroyed during removal and must not be reused.



7 | Removing a polyethylene liner

8 | Removing a ceramic liner

The conical fixation of the ceramic liner is designed in such a way that it can be loosened by the surgeon through application of several pulse-like strikes to the cup rim. To do this, force is applied to the indentations on the rim of the Screw Cup SC using an osteotome. The pulse-like strikes can then be applied several times in succession with a hammer. The pulsing impacts on the circumferential metallic rim of the Screw Ring SC loosen the conical cup-insert connection. The ceramic liner must not be reused after removal.



8 | Removing a ceramic liner

AESCULAP® Plasmacup® SC

Cementless Acetabular Cup System



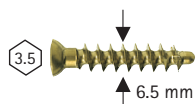
- Modular cementless acetabular cup system
- Use of Biolox®, Vitelene® or standard polyethylene inserts
- Cup outer diameter 40-68 mm
- Articulation diameter 28 mm, 32 mm and 36 mm

Plasmacup® SC implants



Diameter	Plasmacup® SC
40 mm	NH040T
42 mm	NH042T
44 mm	NH044T
46 mm	NH046T
48 mm	NH048T
50 mm	NH050T
52 mm	NH052T
54 mm	NH054T
56 mm	NH056T
58 mm	NH058T
60 mm	NH060T
62 mm	NH062T
64 mm	NH064T
66 mm	NH066T
68 mm	NH068T

Plasmacup® screw SW 6.5 mm



Length	Art. no.
16 mm	NA766T
20 mm	NA770T
24 mm	NA774T
28 mm	NA778T
32 mm	NA782T
36 mm	NA786T
40 mm	NA790T
44 mm	NA794T

Ti6Al4V Titanium forged alloy
(Ti6Al4V/ISO 5832-3)

Ti6Al4V Titanium forged alloy (Ti6Al4V/ISO 5832-3)

Plasmapore® (Ti/ISO 5832-2)

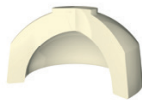
Important note: Plasmacup® DC cup inserts are not compatible with Plasmacup® SC

Plasmacup® SC cup inserts



Cup size	Art. no. symmetrical			Art. no. with shoulder			Art. no. asymmetrical	
	22.2 mm	28 mm	32 mm	22.2 mm	28 mm	32 mm	28 mm	32 mm
40 mm	NH170	-	-	NH300	-	-	-	-
42 mm								
44 mm	NH171	NH191	-	NH301	NH401	-	NH471	-
46 mm								
48 mm	NH172	NH192	NH202	NH302	NH402	-	NH472	-
50 mm								
52 mm	-	NH193	NH203	-	NH403	NH413	NH473	NH323
54 mm								
56 mm	-	NH194	NH204	-	NH404	NH414	NH474	NH324
58 mm								
60 mm	-	NH195	NH205	-	NH405	NH415	NH475	NH325
62 mm								
64 mm								
66 mm	-	NH196	NH206	-	NH406	NH416	NH476	NH326
68 mm								

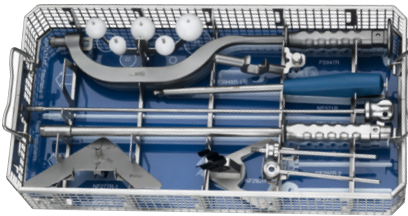
UHMWPE (ISO 5834-2)



Cup size	Art. no. symmetrical			Art. no. with shoulder	
	28 mm	32 mm	36 mm	28 mm	32 mm
44 mm	NH191E	-	-	NH401E	-
46 mm					
48 mm	-	NH202E	-	NH402E	-
50 mm					
52 mm	-	NH203E	-	-	NH413E
54 mm					
56 mm	-	-	NH209E	-	NH414E
58 mm					
60 mm	-	-	NH210E	-	NH415E
62 mm					
64 mm					
66 mm	-	-	NH211E	-	NH416E
68 mm					

Vitelene®

Instruments



Plasmacup® instruments

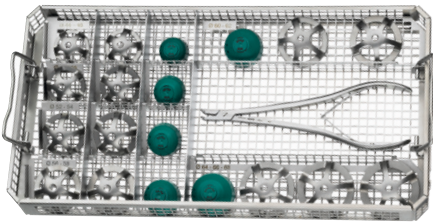
Content	Art. no.
Insertion instrument, straight	FS944R
Basket lid with wide perforations	JH217R
Aiming device for supine positions	NF277R
Aiming device for lateral positions	NF292R
Insertion instrument, curved	FS947R
Opt. T-handle for insertion instrument	FS948R
Ball-head screwdriver ø 8 mm	NF371R
Polyamide head ø 32 mm	ND172
Polyamide head ø 28 mm	ND174
Polyamide head ø 22.2 mm	ND178
Polyamide head ø 26 mm	ND179
Polyamide head ø 36 mm	ND166

Plasmacup® instruments

Content	Art. no.
Shaft for polyamide heads	ND170R
Punch for removing ceramic inserts	ND401R
Slotted hammer 12 mm	NF275R
Articulated screw driver	NF285R
Screw gauge	NF269R
Drill guide for screws ø 3.2 mm	NF278R
Drill guide for screws ø 4.0 mm	NF279R
Basket lid with wide perforations	JH217R

Plasmacup® X-ray templates

Size	Art. no.		
	symmetrical	with shoulder	asymmetrical
44-52 mm	NG400	NG418	NG403
54-62 mm	NG401	NG419	NG404
64-68 mm	NG402	NG420	-



Plasmacup® Trial Cups and Trial Inserts

Content	Art. no.
Plasmacup® SC/MSC Trial Cup 44 mm	NG944R
Plasmacup® SC/MSC Trial Cup 46 mm	NG946R
Plasmacup® SC/MSC Trial Cup 48 mm	NG948R
Plasmacup® SC/MSC Trial Cup 50 mm	NG950R
Plasmacup® SC/MSC Trial Cup 52 mm	NG952R
Plasmacup® SC/MSC Trial Cup 54 mm	NG954R
Plasmacup® SC/MSC Trial Cup 56 mm	NG956R
Plasmacup® SC/MSC Trial Cup 58 mm	NG958R
Plasmacup® SC/MSC Trial Cup 60 mm	NG960R
Plasmacup® SC/MSC Trial Cup 62 mm	NG962R
Plasmacup® SC/MSC Trial Cup 64 mm	NG964R
Plasmacup® SC/MSC Trial Cup 66 mm	NG966R
Plasmacup® SC/MSC Trial Cup 68 mm	NG968R

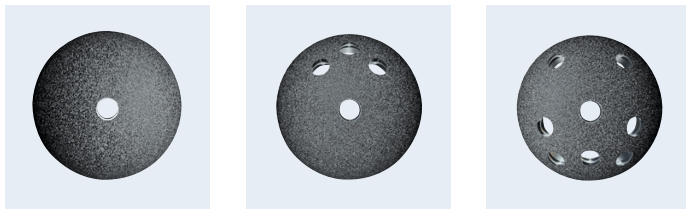
Content	Art. no.
Forceps for removing trial inserts	NG437R
Plasmacup® SC/MSC Trial Cup 40 mm	NG940R
Plasmacup® SC/MSC Trial Cup 42 mm	NG942R

Trial inserts	Art. no. symmetrical				Art. No. with shoulder		Art. no. asymmetrical
	ø 22.2 mm	ø 28 mm	ø 32 mm	ø 36 mm	ø 28 mm	ø 32 mm	ø 32 mm
ø 40/42 mm	NG370	-	-	-	-	-	-
ø 44/46 mm	-	NG391	-	-	NG641	-	-
ø 48/50 mm	-	-	NG502	-	NG642	-	-
ø 52/54 mm	-	-	NG503	-	-	NG513	NG573
ø 56/58 mm	-	-	-	NG509	-	NG514	NG574
ø 60/62 mm	-	-	-	NG510	-	NG515	NG575
ø 64-68 mm	-	-	-	NG511	-	NG516	NG576

Surgical Technique

1 | Preoperative planning

X-ray templates with a magnification of 115% are available. The surgical procedure applies in principle to all Plasmacup SC, NSC, MSC, DC and delta implant series. Plasmacup SC, NSC and MSC cup inserts are not compatible with Plasmacup DC cups. Therefore, the colors of the trial inserts are different in the instrument set (SC/NSC/MS green, DC yellow) and the implant packaging is labeled accordingly.

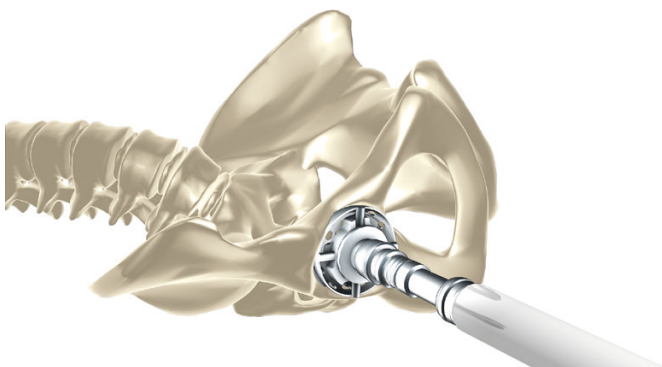


1 | Plasmacup® implant series – position of the screw holes

2 | Preparation of the acetabulum

Implanting the Plasmacup requires a careful surgical technique and bone conditions suitable for the implant's cementless press-fit anchoring. Acetabular exposure and the removal of articular cartilage and non-load bearing osteophytes are required for the proper preparation of the acetabulum. This is done using spherical reamers driven by a low-speed motor handpiece.

During the reaming process, all cartilage must be removed down to the subchondral bone until bleeding occurs.



2 | Reaming of the acetabulum

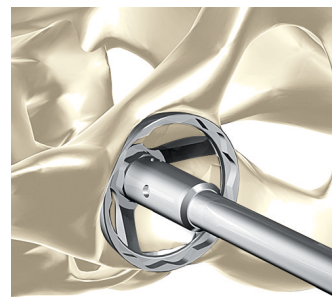
With the exception of dysplastic cups, care must be taken not to medialize the center of joint rotation unnecessarily through the application of axial pressure to the reamer, but instead to prepare the rim of the cup for an adequate bony anchor surface.

In the case of dysplastic changes, a cup position in the primary cup region is recommended if a shortening of the leg can be compensated for. The caudal rim of the cup should be at the level of the pelvic teardrop. To ensure adequate cranial roofing, the acetabular bottom is deepened and, if necessary, an acetabular roof graft is performed in advance.

3 | Plasmacup® trial cups

The nominal size of the Plasmacup implant corresponds to the size of the last acetabular reamer used, as the press-fit outer measurement is included in the implant.

The final implant is only selected once a trial cup has been securely fitted. A stable fit of this trial cup is achieved when the patient's pelvis can be moved by gently moving the trial implant by about 10°. The trial implant can be easily levered out from the in-vivo trial position by moving beyond this angle.



3 | Insertion of the trial cup

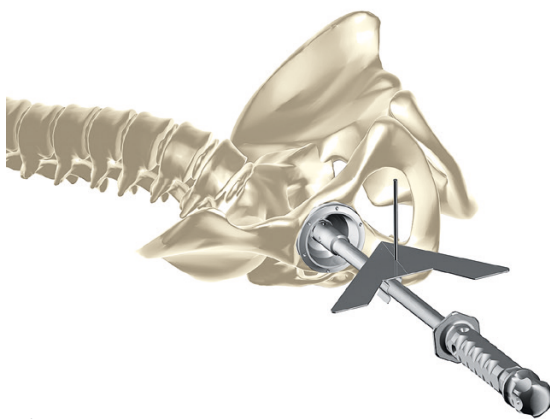
4 | Plasmacup® implantation

The safe and stable fit of the Plasmacup on the insertion instrument must be checked before implantation. The insertion instrument can also be used together with a slotted hammer to shift and correct the position of the Plasmacup.

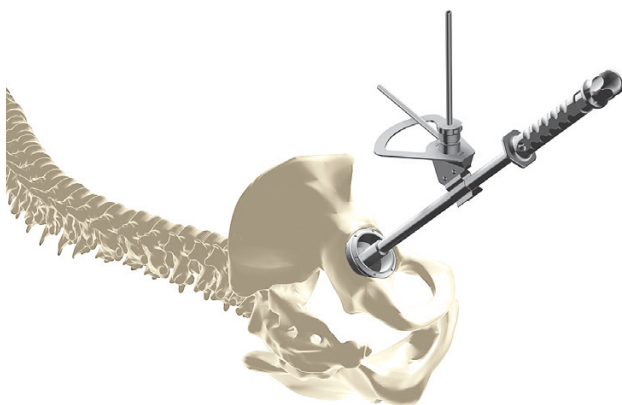
Aiming devices are also available for Plasmacup implantation so that the inclination and anteversion can be adjusted. These are designed for operations in the supine and lateral positions and can be mounted on the insertion instrument.



4 | Plasmacup® Trial Inserts SC (green) and DC (yellow)



4 | Aiming device supine position



4 | Aiming device supine position

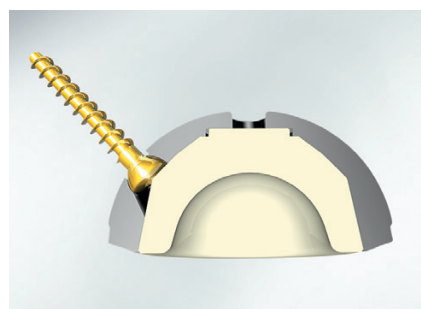
Plasmacup surgical steps: The pelvic exposure, reaming, assessment of the cup bed with the trial implant and implantation of the Plasmacup, are completed with the insertion of a trial cup. The final selection of the modular insert is only made after the stem has been implanted and a final trial reduction has been performed.

5 | Anchoring screws

When the bone is in good condition, the primary implantation of the Plasmacup can generally be performed securely without additional screws. As a stability check, the insertion instrument is pivoted +/- 20° until the patient's pelvis moves. If there is any doubt regarding primary stability during surgery, anchoring screws or another implant must be used.

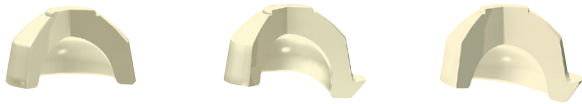
For cases in which additional stabilization with anchoring screws is required, the Plasmacup SC and DC have three holes in the cranial region. Of these, the middle and lateral screw positions are used. The medial screw hole is generally not used to protect the medial blood vessels. The Plasmacup MSC offers additional screw holes in the caudal region. The middle cranial hole is located more medially.

If additional stabilization with self-tapping 6.5 mm screws is required, the holes are prepared with a flexible 3.2 mm drill (or a 4 mm drill in case of heavily sclerotized bone). After measuring the required screw length, the screws are implanted using holding forceps and a cardan screwdriver. Before implanting the modular cup insert, it is important to verify that there are no screw heads protruding into the anchoring area.



5 | Plasmacup® anchoring screws

6 | Plasmacup® cup inserts



6 | Plasmacup® cup inserts

The Plasmacup® PE inserts with shoulder increase the luxation stability, e.g., posteriorly in case of implantation via the posterior approach. The asymmetric inserts correct the cup position by 10°.

7 | Revision of ceramic inserts

The ceramic Plasmacup inserts can be removed with an osteotome. To do so, it is important that the instrument is positioned securely on the implant rim and that the insert is released from the conical anchoring with several taps or pulse-like strikes to the circumference of the cup rim.



7 | Removal of the ceramic inlay

AESCULAP® Gyracup® E

Dual Mobility Acetabular Cup System



- Cemented Dual Mobility
- Use of Biolox® delta or CoCr heads
- Cup outer diameter 46–64 mm
- Articulation diameter 28 mm

Gyracup® E implants



Size	Gyracup® E cemented	Gyracup® E inlays ø 28 mm
46 mm	3700502203653	3700502203868
48 mm	3700502203660	3700502203875
50 mm	3700502203677	3700502203882
52 mm	3700502203684	3700502203899
54 mm	3700502203691	3700502203905
56 mm	3700502203707	3700502203912
58 mm	3700502203714	3700502203929
60 mm	3700502203721	3700502203936
62 mm	3700502203738	3700502203943
64 mm	3700502203745	3700502203950

Note

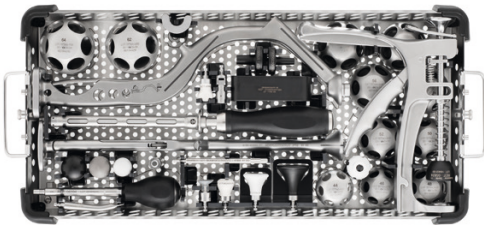
Gyracup® E implants are only to be used with Excia® 12/14 cementless hip stems (Standard and Lateralized) as well as cementless Excia® T 12/14 (Standard and Lateralized) in combination with ø 28 mm femoral heads (neck lengths S and M).

Cobalt-chromium casting alloy (ISO 5832-4)

UHMWPE (ISO 5834-2)

Titanium spray (ASTM F1580)

Hydroxylapatite (ISO 13779-2)



Gyracup® E basic instruments

Gyracup® E basic tray	Art. no.
Tray for basic instruments	M-ACAX-PA-COT
Cup insertion instrument OFFSET	3700502204483
Aiming device anteversion 20°	3700502204506
Aiming device inclination 45°	3700502206104
Handle for attachments	3700502204520
Attachment for insert reduction OD 40 mm	3700502204810
Attachment for reorientation	3700502204827
Attachment for deep impaction	3700502204841
Insertion press for PE and head	3700502206968
Trial cup, size 46 mm	3700502204544
Trial cup, size 48 mm	3700502204551
Trial cup, size 50 mm	3700502204568
Trial cup, size 52 mm	3700502204575
Trial cup, size 54 mm	3700502204582
Trial cup, size 56 mm	3700502204599
Trial cup, size 58 mm	3700502204605
Trial cup, size 60 mm	3700502204612
Trial cup, size 62 mm	3700502204629
Trial cup, size 64 mm	3700502204636
Trial insert ID 28 mm OD 46 mm	3700502204674
Trial insert ID 28 mm OD 48 mm	3700502204681
Trial insert ID 28 mm OD 50 mm	3700502204698
Trial insert ID 28 mm OD 52 mm	3700502204704
Trial insert ID 28 mm OD 54 mm	3700502204711

Trial insert ID 28 mm OD 56 mm	3700502204728
Trial insert ID 28 mm OD 56 mm	3700502204735
Trial insert ID 28 mm OD 60 mm	3700502204742
Trial insert ID 28 mm OD 62 mm	3700502204759
Trial insert ID 28 mm OD 64 mm	3700502204766

Optional:	Art. no.
Cup insertion instrument STRAIGHT	3700502204490
Holding device extractor	3700502206975

AESCULAP® IMSET

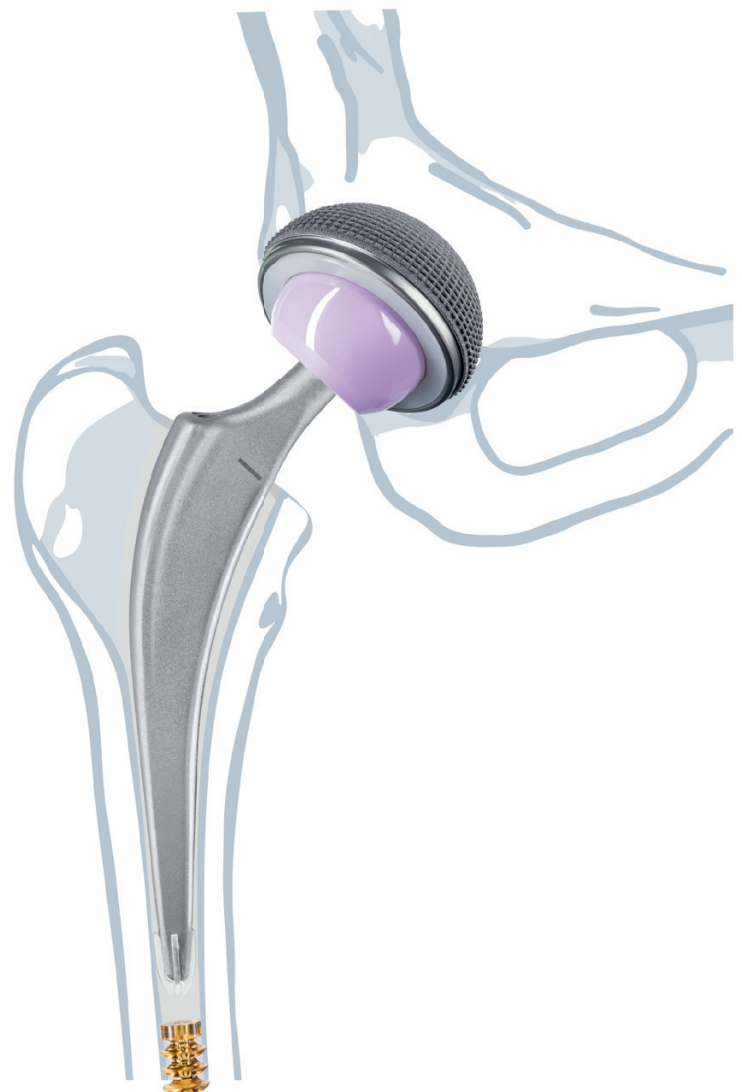
Absorbable medullary plug



- Cannulated absorbable plug
- Absorbed within a few days
- Modular instruments for medullary plugging
- Can also be used for an autologous medullary plug

mm	Plug
8	NK908
10	NK910
12	NK912
14	NK914
16	NK916
18	NK918

The materials used in the implants are listed on the packaging.
The composition of the IMSET plug is as follows:
Gelatin (porcine gelatin), approx. 57%
Glycerol (glycerin), approx. 37%
Water (purified), approx. 6%
Methyl parahydroxybenzoate, approx. 0.2%
The individual ingredients meet the requirements of the European Pharmacopoeia.

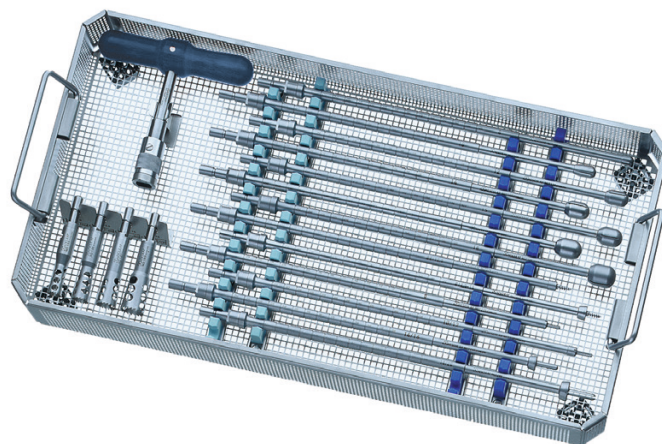


Instruments

NG003 IMSET

Instruments for medullary plugging

Consisting of:	Art. no.
Insertion instrument for cancellous bone screw 8 – 12.5 mm	NG005R
IMSET handle	ND144R
IMSET medullary probe 8 mm	NG708R
IMSET medullary probe 10 mm	NG710R
IMSET medullary probe 12 mm	NG712R
IMSET medullary probe 14 mm	NG714R
IMSET medullary probe 16 mm	NG716R
IMSET medullary probe 18 mm	NG718R
Insertion instrument for IMSET plug 8 mm	NG722R
Insertion instrument for IMSET plug 10/12 mm	NG724R
Insertion instrument for IMSET plug 14/16 mm	NG726R
Insertion instrument for IMSET plug 16/18 mm	NG728R



Recommended AESCULAP® container:
590 x 285 x 105 mm

Please order separately:	Art. no.
Insertion instrument for cancellous bone screw 8 – 12.5 mm	NG702R
Insertion instrument for cancellous bone screw 12.5 – 18 mm	NG704R
IMSET medullary probe 15 mm	NG715R
IMSET cancellous bone reamer, 8 – 10 mm	ND185R
IMSET cancellous bone reamer, 10 – 12.5 mm	ND186R
IMSET cancellous bone reamer, 12.5 – 15 mm	ND187R
IMSET cancellous bone reamer, 15 – 18 mm	ND189R



Surgical Technique

Note

The straight IMSET implantation instruments are intended for posterior and direct lateral approach to the hip joint. The instruments are not indicated for use with direct anterior or anterolateral approach to the hip joint.

1 | Determining the depth of the cement mantle

The length of the cement mantle is determined on the basis of the prosthesis stem. The medullary plug should be positioned 10 to 15 mm below the tip of the cemented prosthesis stem.

2 | Measuring the medullary canal

The most suitable IMSET absorbable medullary plug is selected by stepwise measurement of the medullary canal using the IMSET medullary probes. The probes are coupled to a T-handle with a Harris connector and have a scale for orientation. The medullary probes are inserted into the medullary canal up to the previously determined insertion depth. The IMSET absorbable medullary plug selected must be one size larger than the last medullary probe inserted.

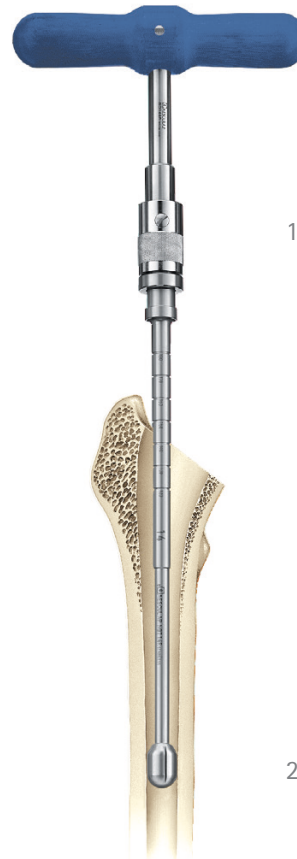
3 | Implantation of IMSET medullary plug

The medullary plug selected is mounted on the corresponding insertion instrument and inserted into the medullary canal up to the specified penetration depth. The insertion instrument is connected to the T-handle.

The instrument must not be pulled backwards during the insertion process. The insertion instrument should only be withdrawn when the penetration depth is reached.

4 | Procedure for autologous medullary plugging

In the case of the implantation of an autologous medullary plug, the defined size is prepared using the corresponding IMSET cancellous bone reamer. The size ranges are indicated on the cancellous bone reamers (e.g., 10 – 12.5 mm). The smallest reamer size value is used when selecting the reamer. Cancellous bone reamers are used to cut conically shaped autologous bone plugs from the femoral head (manually with T-handle or mechanically with a Harris connection). The autologous medullary plug is implanted using an insertion instrument with a threaded tip, which is unscrewed once the medullary plug has been positioned.



1 | Determining the depth of the cement mantle

2 | Measuring the medullary canal



3 | Insertion of an absorbable IMSET medullary plug

4 | Inserting an autologous intramedullary plug

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