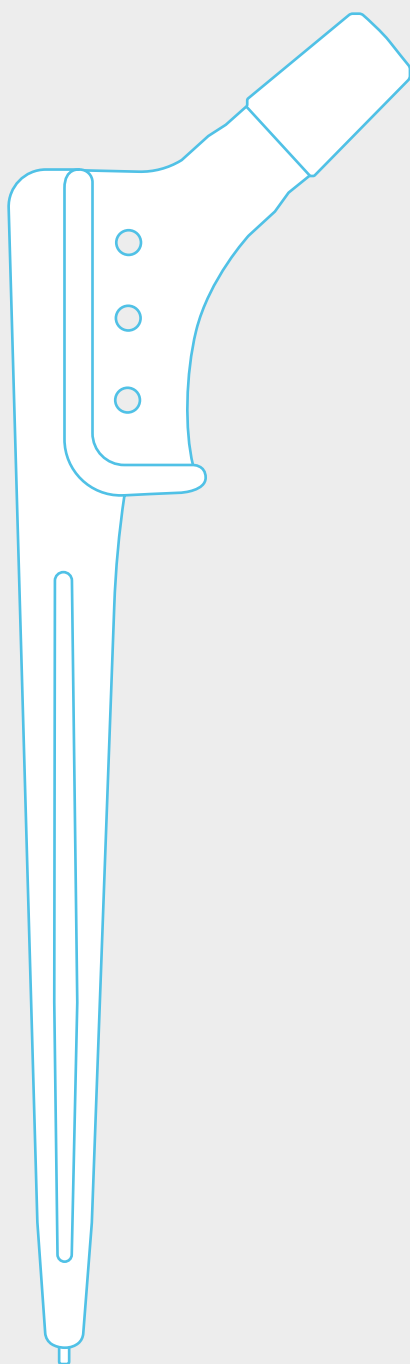




hipprosthesiscatalog

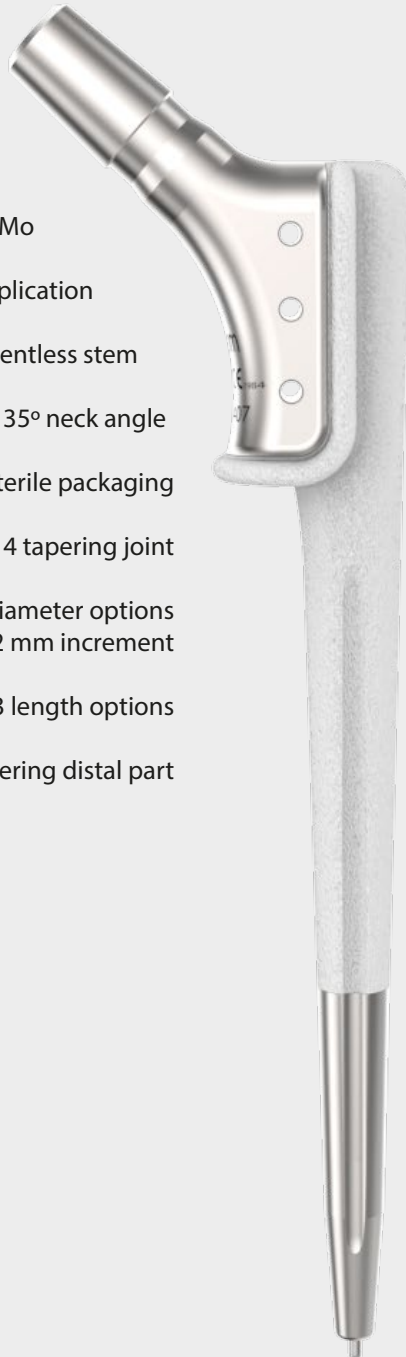
tst

Orthopedic Implants



calcar

calcar



Made of CoCrMo

Cemented or cementless application

Double coating (PC+HA) as cementless stem

135° neck angle

Sterile packaging

12/14 tapering joint

Diameter options
from 10 mm to 18 mm with 2 mm increment

3 length options

Tapering distal part

Designed to be used in cases of bone loss in the proximal femur,
unstable fractures and nonunion of the fracture.

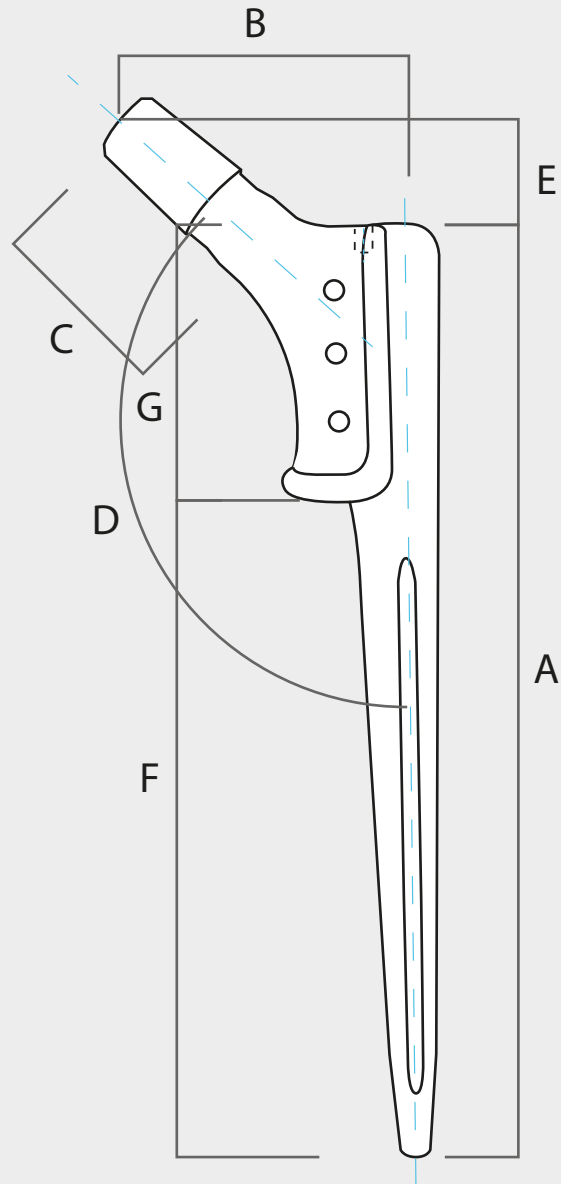
It ensures rotational and axial stability by settling properly with its tapering structure.
Holes in the body enables passing of the cables, wires and sutures that
ensure safe and stable fixation.

Diameter options are 10 mm, 12 mm, 14 mm, 16 mm, 18 mm.

Length options are 25 mm, 35 mm, 45 mm.

It can be applied cementless with coated options.

Double coating options -Porous+Hydroxyapatite- are available for cementless applications.

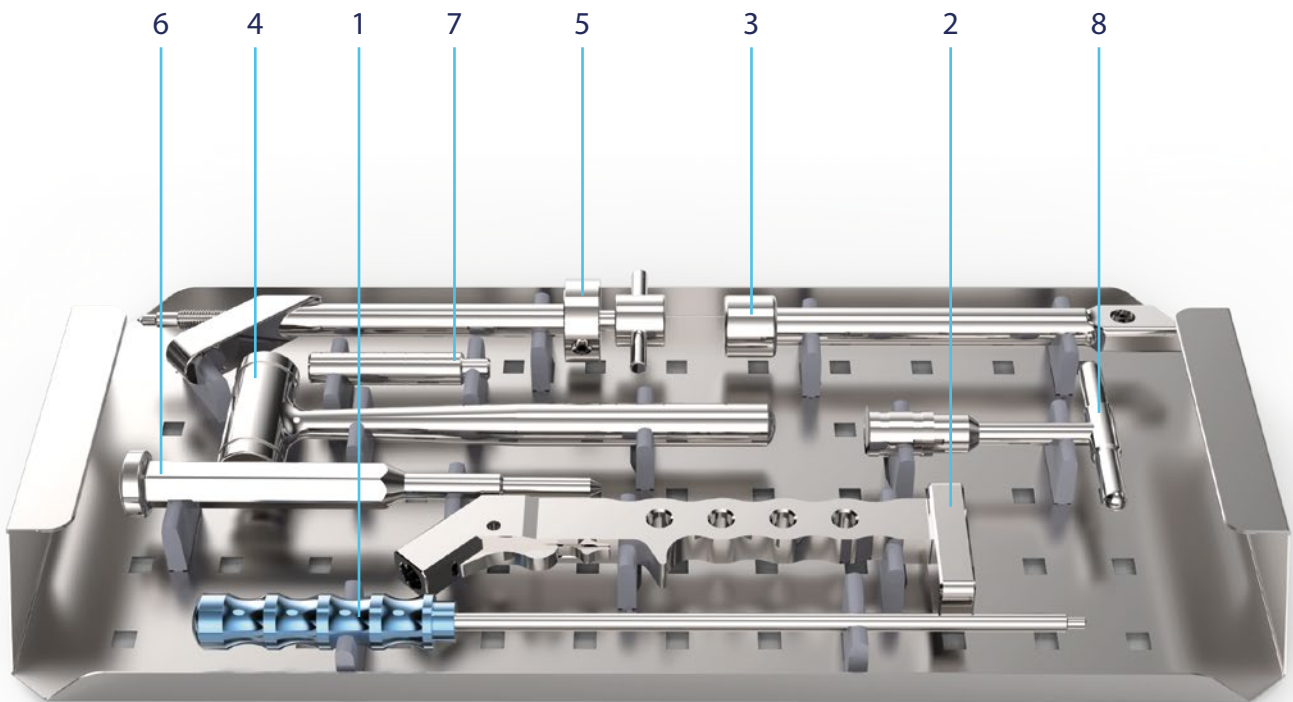


Diameter (mm)	Stem Length (mm) (A)	Offset (mm) (B)	Neck Length (mm) (C)	Neck Shaft Angle (°) (D)	Neck Stem Length (mm) (E)	Plug Set Length (mm) (F)	Calcar Length (mm) (G)
10x25	175	39.5	31.2	135	14.1	150	25
10x35	175	39.5	31.2	135	14.1	140	35
10x45	175	39.5	31.2	135	14.1	130	45
12x25	175	41.3	31.2	135	15.1	150	25
12x35	175	41.3	31.2	135	15.1	140	35
12x45	175	41.3	31.2	135	15.1	130	45
14x25	175	43.6	31.2	135	16.1	150	25
14x35	175	43.6	31.2	135	16.1	140	35
14x45	175	43.6	31.2	135	16.1	130	45
16x25	175	43.1	31.2	135	17	150	25
16x35	175	43.1	31.2	135	17	140	35
16x45	175	43.1	31.2	135	17	130	45
18x25	175	43.4	31.2	135	18.2	150	25
18x35	175	43.4	31.2	135	18.2	140	35
18x45	175	43.4	31.2	135	18.2	130	45

Instruments

tray 1

No	Code	Barcode	Description	Qty.
	00000504200	8699931023992	1.DESIGN TRAY INSTRUMENT	
1	01170000010	8698673494787	PLUG HOLDER FOR CALCAR STEM	1
2	01192200024	8698673497450	RASP HOLDER	1
3	01192000005	8698673490390	BOX CHISEL	1
4	01193001009	8699931028140	BONE HAMMER - LARGE	1
5	01015000000	8698673494480	ROTATION CONTROLLED STEM IMPACTOR	1
6	01192000030	8698673494268	STEM IMPACTOR	1
7	01192000003	8698673496231	ANTEVERSION ROD	1
8	01193000023	8698673493780	T QUICK HANDLE	1



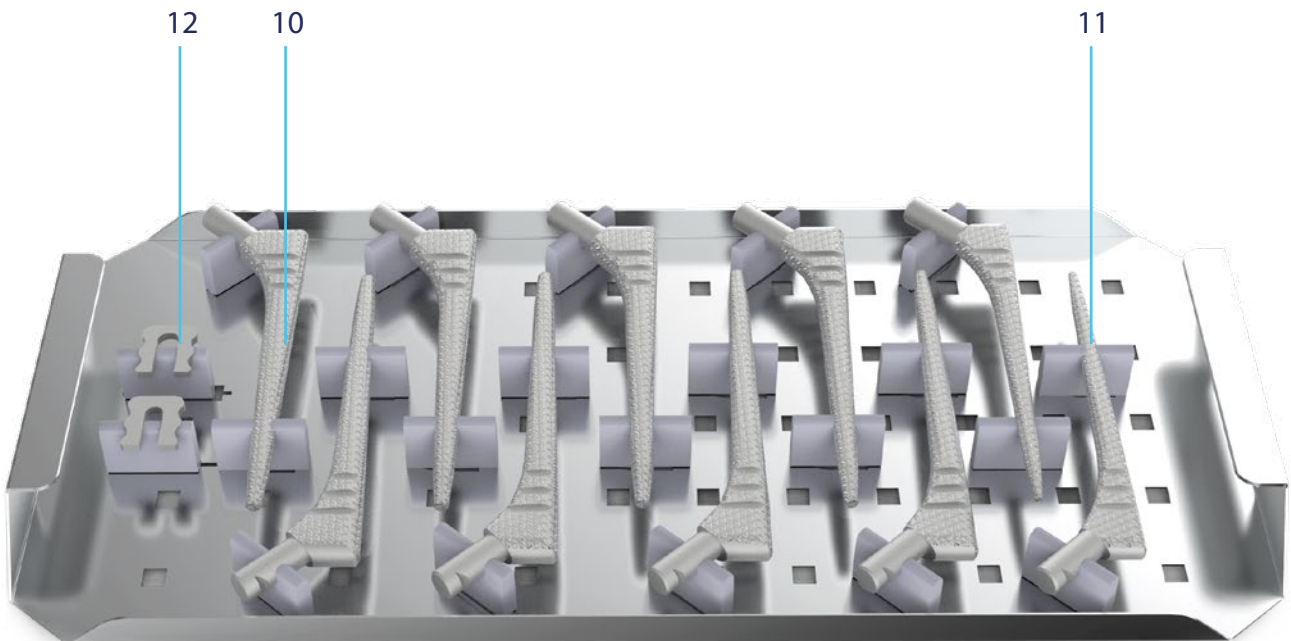
|tray 2

No	Code	Barcode	Description	Qty.
	501400	8680858431182	2.DESIGN TRAY FOR CALCAR REAMERS	
9	01095000010	8698673496576	REAMER FOR CALCAR Ø 10 MM	1
	01095000012	8698673496583	REAMER FOR CALCAR Ø 12 MM	1
	01095000014	8698673496590	REAMER FOR CALCAR Ø 14 MM	1
	01095000018	8680858419760	REAMER FOR CALCAR Ø 16 MM	1
	01095000018	8680858419760	REAMER FOR CALCAR Ø 18 MM	1



tray 3

	No	Code	Barcode	Description	Qty.
Cemented		00000501300	8699931023978	3.DESIGN TRAY FOR CALCAR RASP	1
	10	01091250010	8698673495647	RASP FOR CALCAR REP. STEM COCRMO 10X25 MM	1
		01091250012	8698673495654	RASP FOR CALCAR REP. STEM COCRMO 12X25 MM	1
		01091250014	8698673495654	RASP FOR CALCAR REP. STEM COCRMO 14X25 MM	1
		01091250016	8698673496613	RASP FOR CALCAR REP. STEM COCRMO 16X25 MM	1
		01091250018	8680858419739	RASP FOR CALCAR REP. STEM COCRMO 18X25 MM	1
Cementless	11	01091000110	8698673465091	RASP FOR CALCAR REP. STEM CEMENTLESS Ø 10 MM	1
		01091000112	8698673465107	RASP FOR CALCAR REP. STEM CEMENTLESS Ø 12 MM	1
		01091000114	8698673465114	RASP FOR CALCAR REP. STEM CEMENTLESS Ø 14 MM	1
		01091000116	8680858419722	RASP FOR CALCAR REP. STEM CEMENTLESS Ø 16 MM	1
		01091000118	8698673465121	RASP FOR CALCAR REP. STEM CEMENTLESS Ø 18 MM	1
Resection Marker	12	01091100001	8699931009682	CALCAR RESECTION MARKER 10-12	1
		01091100002	8680858431366	CALCAR RESECTION MARKER 14-16- 18	1
		00580280150	8698673498174	CONTAINER 580X280X150 MM	



Implants

	Code	Barcode	Description
CoCrMo Cementless Stem	10932591210	8698673443143	CALCAR REP. STEM COCRMOC PC+HA COATED 10X25 MM
	10933591210	8698673443150	CALCAR REP. STEM COCRMOC PC+HA COATED 10X35 MM
	10934591210	8698673443167	CALCAR REP. STEM COCRMOC PC+HA COATED 10X45 MM
	10932591212	8698673443174	CALCAR REP. STEM COCRMOC PC+HA COATED 12X25 MM
	10933591212	8698673443181	CALCAR REP. STEM COCRMOC PC+HA COATED 12X35 MM
	10934591212	8698673443198	CALCAR REP. STEM COCRMOC PC+HA COATED 12X45 MM
	10932591214	8698673443204	CALCAR REP. STEM COCRMOC PC+HA COATED 14X25 MM
	10933591214	8698673443211	CALCAR REP. STEM COCRMOC PC+HA COATED 14X35 MM
	10934591214	8698673443228	CALCAR REP. STEM COCRMOC PC+HA COATED 14X45 MM
	10932591216	8698673443235	CALCAR REP. STEM COCRMOC PC+HA COATED 16X25 MM
	10933591216	8698673443242	CALCAR REP. STEM COCRMOC PC+HA COATED 16X35 MM
	10934591216	8698673443259	CALCAR REP. STEM COCRMOC PC+HA COATED 16X45 MM
	10932591218	8680858424757	CALCAR REP. STEM COCRMOC PC+HA COATED 18X25 MM
	10933591218	8680858424764	CALCAR REP. STEM COCRMOC PC+HA COATED 18X35 MM
	10934591218	8680858424771	CALCAR REP. STEM COCRMOC PC+HA COATED 18X45 MM
CoCrMo Cemented Stem	10932501210	8698673434158	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 10X25
	10933501210	8698673434165	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 10X35
	10934501210	8698673434172	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 10X45
	10932501212	8698673434189	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 12X25
	10933501212	8698673434196	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 12X35
	10934501212	8698673434202	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 12X45
	10932501214	8698673434219	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 14X25
	10933501214	8698673434226	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 14X35
	10934501214	8698673434233	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 14X45
	10932501216	8698673434240	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 16X25
	10933501216	8698673434257	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 16X35
	10934501216	8698673434264	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 16X45
	10932501218	8680858408320	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 18X25
10933501218	8680858408337	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 18X35	
10934501218	8680858408344	CALCAR REP. STEM COCRMOC-CEMENTED-SANDBLASTED 18X45	
Centraliser	10970000100	8698673434448	CENTRALISER FOR CALCAR COCRMOC 10 MM
	10970000120	8698673434455	CENTRALISER FOR CALCAR COCRMOC 12 MM
	10970000140	8698673434462	CENTRALISER FOR CALCAR COCRMOC 14 MM
	10970000160	8698673434479	CENTRALISER FOR CALCAR COCRMOC 16 MM
	10970000180	8680858428779	CENTRALISER FOR CALCAR COCRMOC 18 MM
Plug X-Ray Ring	11770000015	8698673431515	PLUG X - RAY RING (7.5-11 MM STEMS)
	11770000024	8698673431522	PLUG X - RAY RING (11-13.5 MM STEMS)
	11770000029	8698673431508	PLUG X - RAY RING (13.5-15 MM STEMS)

Surgical Technique

1 FEMORAL HEAD OSTEOTOMY

1st osteotomy is made to the femoral shaft over 1.5-2 cm of trochanter minor with the angle of 90°. If the trochanter exists, the 2nd osteotomy is made endlong to the first cut from the trochanter tip.

The cut femoral head is removed from acetabulum by *Femoral Head Extractor*.



2 FEMORAL HEAD MEASUREMENT

The width of the cut femoral head is determined by *Femoral Head Measuring Device*.

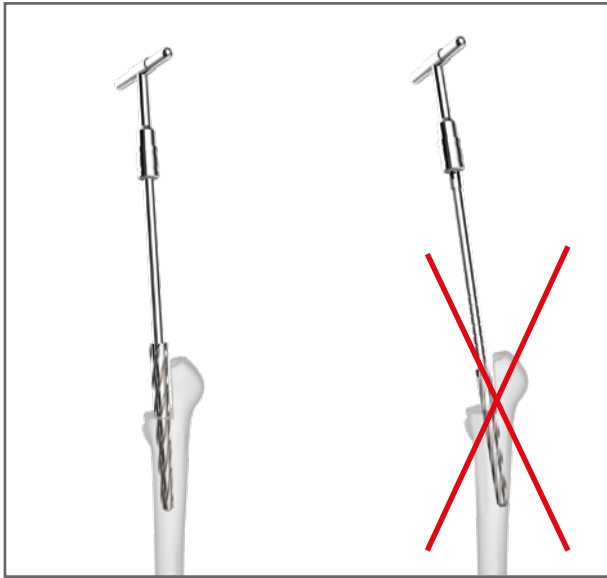


3 ACCESS TO MEDULLA CANAL

Access to the medullary cavity from osteotomy line is obtained with *Box Chisel*.

Note: Please pay attention to femoral head anteversion.





4 CARVING OPERATION FOR FEMORAL STEM

Entry is made from piriformis fossa to medulla by the starting reamer.

It is carved until reaching to the proper canal width by a **Reamer** which is assembled to **T Quick Handle** from trochanteric tip to femoral shaft.

Note: To make the reamer choice, the smallest size should be tried in the beginning and the size should be increased gradually. The last reamer size demonstrates the stem size.



5 RASPING

Rasping operation (considering anteversion) is started with the smallest **Rasp** which is fixed to **NT Rasp Holder**. Before rasping, the suitable **Calcar Resection Marker** to the calcar length is fixed to the rasp. The rasping operation is proceeded until attaining sufficient bone strength by using incremental lengths. The recent used **Rasp** determines the Stem length.

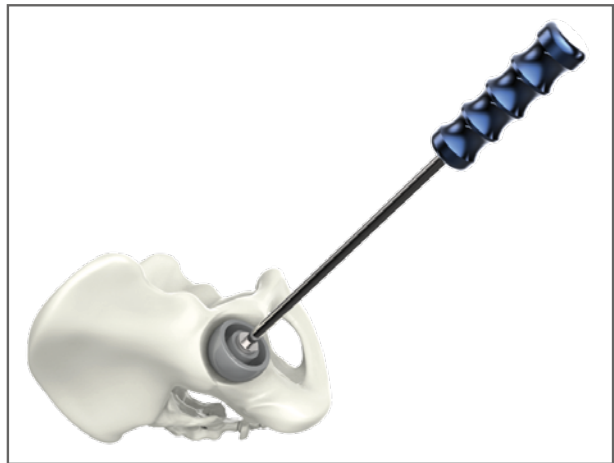
Note: Different rasps are used for Cemented and Cementless applications.

*Please refer to pg 45 for application with A. Unipolar Head.
Please refer to pg 48 for application with Bipolar Head.*

A. Unipolar Head Application

6 A. UNIPOLAR TRIAL

Width of *A.Unipolar Trial* is determined by femoral head measurement (Section 2). Then *A.Unipolar Trial* is fixed to *A.Unipolar Trial Holder* and the suitability with acetabulum is tested.



7 RING SIZE DETERMINATION

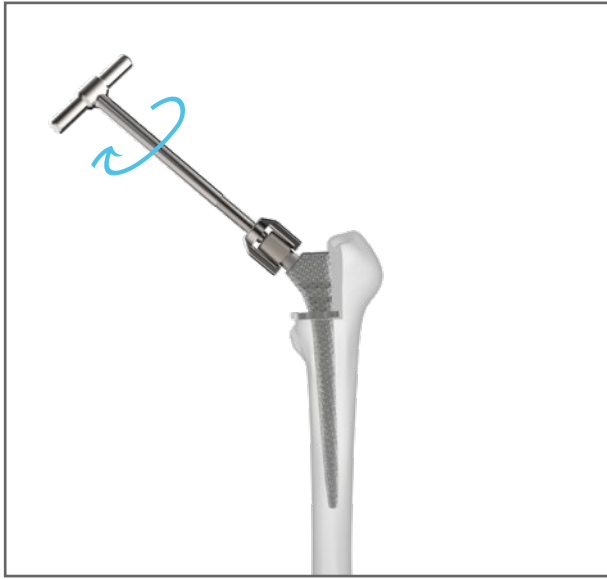
After designating the size of *A.Unipolar Trial*, it is placed onto *A.Unipolar Ring Trial* which is held to the rasp in order to determine the suitability of the ring size.



8 MOTION TEST

After the trial insertions, the leg motion is controlled to test the size suitability.





9 REMOVING RING TRIAL From the Rasp

The **Ring Trial** which is fixed to the **Rasp** is extracted by **Stem Ring Extractor** as in the figure.

Please rotate the instrument until trials are extracted.



From the A.Unipolar Trial

The **Ring Trial** which is fixed to **A.Unipolar Trial** is extracted by **A.Unipolar Ring Extractor** as in the figure.

Please rotate the instrument until the ring is extracted.



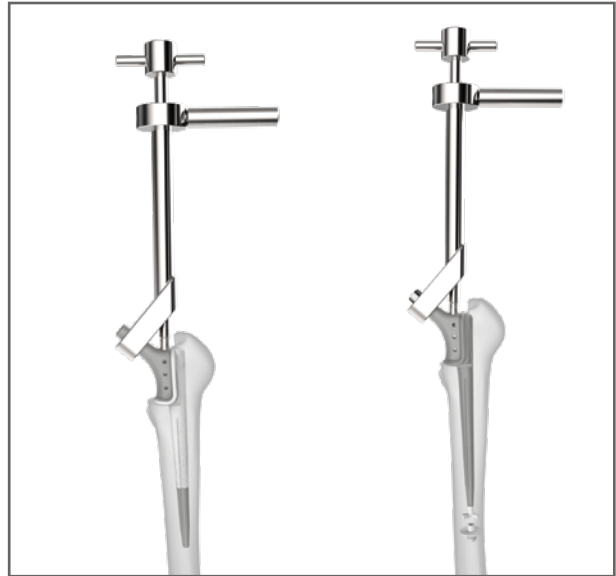
10 PLUG PLACEMENT for Cemented Applications

Before the application of cement, the medulla is closed by **Plug** which is assembled to the **Plug Holder**. The **Plug Holder** is advanced until the marked part that indicates stem length.

11 PLACEMENT OF THE STEM

Centraliser for *Calcar* fixed to distal part of the *Stem*.
The Stem is fixed to *Rotation Controlled Stem Impactor* which is fixed to rotation controlled *Anteversión Rod* and it is positioned considering anteversion angle.

In cemented applications, position of the stem is kept constant until the cement is solidified.



11 HAMMERING OF STEM

In cementless applications, the *Stem Impactor* ensures an exact placement of the stem.

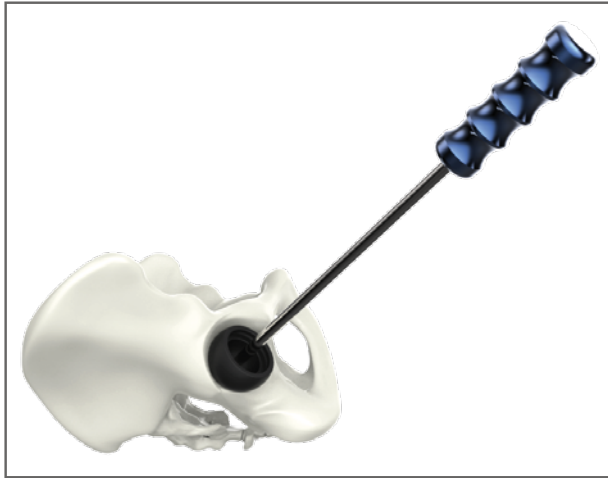


12 A. UNIPOLAR HEAD FIXING

A.Unipolar Head which is placed onto *A.Unipolar Ring* -after designating the size by trials- is hammered and fixed by *Femoral Head Impactor*.



Bipolar Head Application



6 BIPOLAR TRIAL

The width of *Bipolar Trial Head* is determined (Section 2). It is fixed to *Bipolar Trial Head Holder* and the suitability with acetabulum is tested.



7 MODULAR HEAD SIZE DETERMINATION

After designating the size of *Bipolar Trial Head*, it is placed onto *Modular Trial Head* which is held to the rasp in order to determine the suitability of the *Modular Head* size.



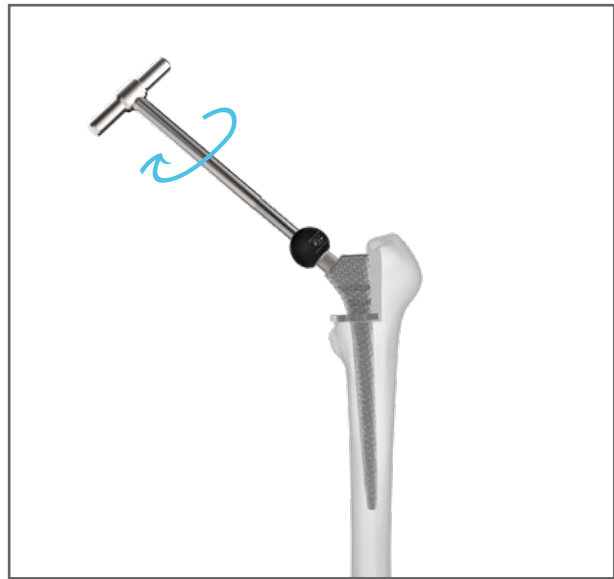
8 MOTION TEST

After the trial insertions, the leg motion is controlled to test the size suitability.

9 MODULAR TRIAL HEAD EXTRACTION

Modular Trial Head which is fixed to *Rasp* is extracted by *Modular Trial Head Extractor* as in the figure.

Please rotate the instrument until the trials are extracted.



10 PLUG PLACEMENT for Cemented Applications

Before the application of cement, the medulla is closed by *Plug* which is assembled to the *Plug Holder*. The *Plug Holder* is advanced until the marked part that indicates stem length.



11 PLACEMENT OF THE STEM

Centraliser for Calcar fixed to distal part of the *Stem*. The *Stem* is fixed to *Rotation Controlled Stem Impactor* which is fixed to *rotation controlled Anteversion Rod* and it is positioned considering anteversion angle.

In cemented applications, position of the stem is kept constant until the cement is solidified.





12 HAMMERING STEM

In cementless applications, the *Stem Impactor* ensures an exact placement of the stem.



13 MODULAR HEAD FIXING

After designating the size of *Modular Head* by trials, it is hammered by *Modular Head Impactor*.



14 BIPOLAR HEAD PLACEMENT

The *Segman* is extracted from *Bipolar Head* by *Bipolar Insert Ring Forceps* then *Bipolar Head* placed into *Modular Head* and pushed until 'click' sound is heard. The extracted *Segman* is placed again.



APPLICATION WITH THE CABLE SYSTEM

By means of holes in proximal of the stem, the trochanter fractures are fixed with a cable system.