



Product Catalogue

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WE
believe
that we can help
THE PATIENTS WALK NOW AND ALWAYS

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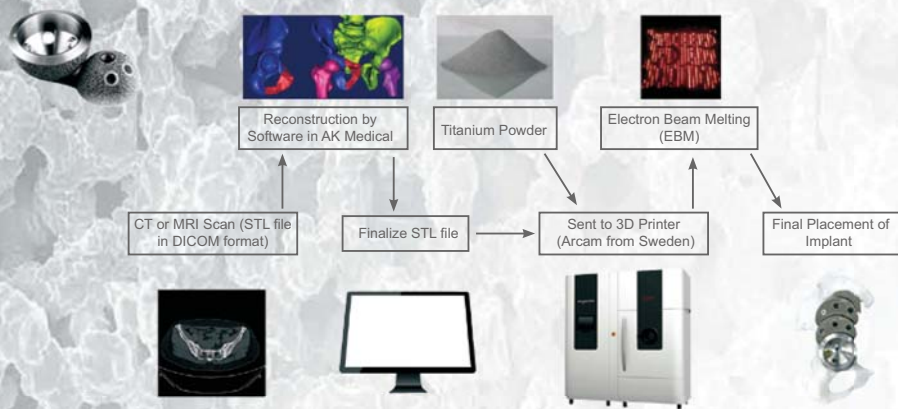
3D ACT Hip System

World's First Breakthrough 3D Printed Hip Joint System Approved by Clinical Trial

China's First Breakthrough 3D Printed Hip Joint System Approved by CFDA



Technical Flow Process



To Order a Customized Implant

Let's Scan
 The first step in Customized Implants is sending your patient for a CT/MRI scan. The scan should be at least 0.6mm slice thickness in DICOM format (a STL file). You can copy the file and sent it to us in a CD or just email it to us via the network disk (www.spaces.hightail.com or www.wetransfer.com)

Let's Plan
 The second step in Customized Implants Surgery is to get a 3D conversion of your patients CT scan. A 3D conversion is a reconstruction of the patient's diseased region from the CT scan slices. It can also include segmentation of the anatomy into separate 3D layers. Using the very latest in Software technology, the implant size, length and position is planned; vital structures adjacent to the implant are noted and maneuvered.

Let's Implant
 The third step in Customized Implants Surgery is to make the final placement of implant with a professional surgeon.

A3 Cutting Block

CT Data Requirement

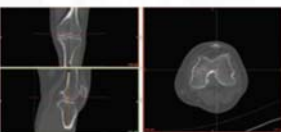
Method I: Provide image data for hip joint, knee joint and ankle joint.



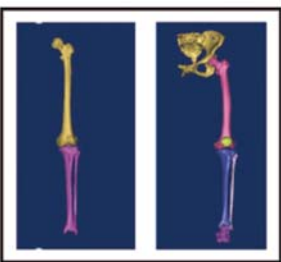
Method II: Provide CT data around knee and lower limb.



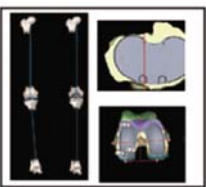
To Order a Cutting Block



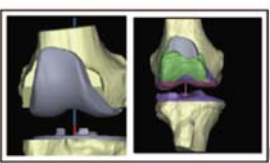
①CT or MRI Scan (STL file in DICOM format)



②Reconstruction by Software in AK Medical



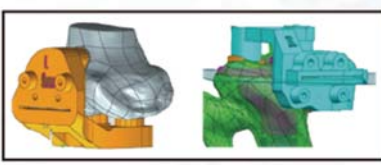
③Surgical planning based on client's inputs



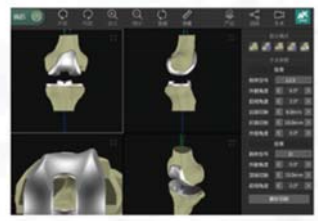
④Prosthesis simulated implantation



⑦Producing cutting block



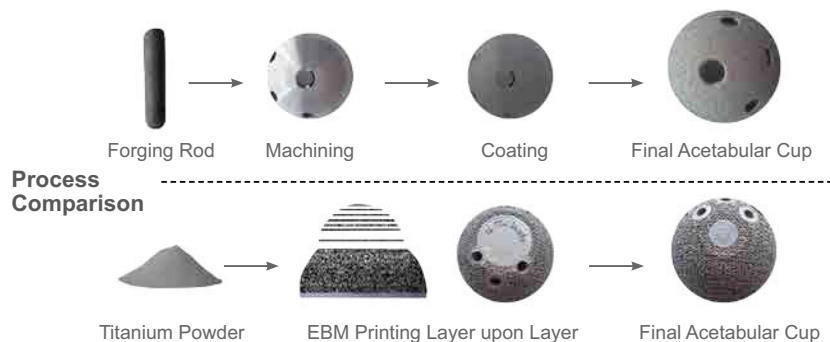
⑥Finalize STL file



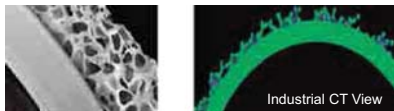
⑤Images sent to surgeon---Surgeon approves

3D Printing Process

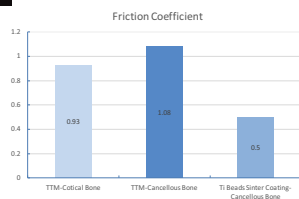
- MOI 3D printing Trabecular Titanium implants are built via the most advanced Electron Beam Melting (EBM) technology, using a high-energy focused beam to locally melt titanium powders layer upon layer



- The Trabecular Titanium structure is not a coating



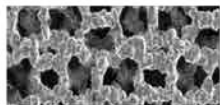
- Overcoming the coating concept, there is no interface between the bulk structure and the porous trabecular surface, no risk of detachment



- The Trabecular Titanium structure is not a coating, but the bone in-growth friendly interconnected 3D-geometric structure, it is created by Electron Beam Melted free from fabricated technology, the effectively long-term osseointegration and biocompatibility have been proved in many published studies



- With the 3D printing technology, it is possible to obtain a perfectly controlled porosity



Reference	3D ACT System
Diameter	600µm~1000µm
Porosity	60%~90%

3D ACT System

AK-AC-II-TTM-I Acetabular Cup

- Trabecular Metal Technology offers a high coefficient of friction which helps reduce micromotion, enabling tissue growth. Its 3D construct provides a high level of porosity and potential for osteoconductivity allows for more rapid in-growth supporting a vascularized structure to maintain healthy bone. Implant durability leads to longevity and reduced risk for future surgeries;
- Liner ring serration design provides stable fixation between shell and liner and minimizes micromotion.



AK-AC-II-TTM-I Acetabular Cup

Size Ref. (O.D./I.D.)	Cat. No.	Description	Matched Liner size (O.D./I.D.)	Matched Liner size (O.D./I.D.)	Matched Liner size (O.D./I.D.)	Matched Femoral Head Dia.
38/32	2323-3832	Name: AK-AC-II-TTM-I Acetabular Cup	32/22	-	-	22
40/32	2323-4032		32/22	-	-	22
42/34	2323-4234		34/22	-	-	22
44/36	2323-4436		36/28	-	-	28
46/38	2323-4638		38/28	-	-	28
48/40	2323-4840	Material: Titanium Alloy Customized Supplied	40/28	40/32	-	28/32
50/42	2323-5042		42/28	42/32	-	28/32
52/44	2323-5244	Surface: Titanium Trabecular Metal, 3D-geometric Structure	44/28	44/32	44/36	28/32/36
54/46	2323-5446		46/28	46/32	46/36	28/32/36
56/48	2323-5648	Matched Liner: AK-L-II Liner HXLPE	48/28	48/32	48/36	28/32/36
58/50	2323-5850		50/28	50/32	50/36	28/32/36
60/52	2323-6052	Matched Stem: AK-ML-TP, AK-ML-TH, AK-MP-TP, AK-MR, AK-SL, AK-MF, AK-SR, AK-CL, AK-SL-CONE	52/28	52/32	52/36	28/32/36
62/54	2323-6254		54/28	54/32	54/36	28/32/36
64/54	2323-6454		54/28	54/32	54/36	28/32/36
66/58	2323-6658		58/28	58/32	58/36	28/32/36
68/58	2323-6858		58/28	58/32	58/36	28/32/36
70/60	2323-7060		60/28	60/32	60/36	28/32/36

3D ACT System

AK-AC-II-TTM-V Acetabular Cup



AK-AC-II-TTM-V Acetabular Cup

Size Ref. (O.D./I.D.)	Cat. No.	Description	Matched Liner size (O.D./I.D.)	Matched Liner size (O.D./I.D.)	Matched Liner size (O.D./I.D.)	Matched Femoral Head Dia.
48/40	2321-4840	Name:AK-AC-II-TTM-V Acetabular Cup	40/28	40/32	-	28/32
50/42	2321-5042		42/28	42/32	-	28/32
52/44	2321-5244		44/28	44/32	44/36	28/32/36
54/46	2321-5446	Material: Titanium Alloy Customized Supplied	46/28	46/32	46/36	28/32/36
56/48	2321-5648		48/28	48/32	48/36	28/32/36
58/50	2321-5850	Surface: Titanium Trabecular Metal, 3D-geometric Structure	50/28	50/32	50/36	28/32/36
60/52	2321-6052		52/28	52/32	52/36	28/32/36
62/54	2321-6254	Matched Liner: AK-L-II Liner HXLPE	54/28	54/32	54/36	28/32/36
64/54	2321-6454	Matched Stem: AK-ML-TP, AK- ML-TH, AK-MP-TP, AK-MR, AK- SL, AK-MF, AK-SR, AK-CL, AK- SL-CONE	54/28	54/32	54/36	28/32/36
66/58	2321-6658		-	58/32	58/36	32/36
68/58	2321-6858		-	58/32	58/36	32/36
70/60	2321-7060		-	60/32	60/36	32/36

3D ACT System

Titanium Trabecular Augment



Titanium Trabecular Augment

Size Ref. (O.D./I.D.)	Cat. No.	Description	Thickness	Matched Cups Outer Dia.
50/40	5001-5040	Name: Titanium Trabecular Augment	15	50, 52
52/42	5001-5242		25	50, 52
54/44	5001-5444		15	54, 56
56/46	5001-5646		25	54, 56
58/48	5001-5848	Material: Titanium Alloy Customized Supplied	15	58, 60
60/50	5001-6050		25	58, 60
62/52	5001-6252	Surface: Titanium Trabecular Metal, 3D-geometric Structure	15	62, 64
64/54	5001-6454		25	62, 64
66/56	5001-6656		15	66, 68
68/58	5001-6858		25	66, 68

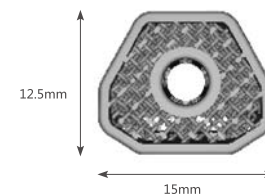
METIS

Artificial Cervical Cage

- Curved-shape design with maximum endplate contact, prevents endplate collapse.
- ML 15mm, AP 12.5mm, wedge-shape, curved-shape.
- 6 heights in 1mm increment, 5~10mm.
- 3 lordosis angles for multiple orthopedic designs.
- Preserved bone graft windows if bone graft is required.

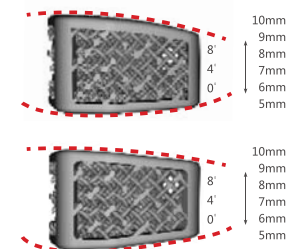
Curved-shape

Cat. No. (0°)	Cat. No. (4°)	Cat. No. (8°)	Height (mm)	ML(mm)	AP(mm)
5025-0405	5025-0445	5025-0485	5	15	12.5
5025-0406	5025-0446	5025-0486	6	15	12.5
5025-0407	5025-0447	5025-0487	7	15	12.5
5025-0408	5025-0448	5025-0488	8	15	12.5
5025-0409	5025-0449	5025-0489	9	15	12.5
5025-0400	5025-0440	5025-0480	10	15	12.5



Wedge-shape

Cat. No. (0°)	Cat. No. (4°)	Cat. No. (8°)	Height (mm)	ML(mm)	AP(mm)
5025-0205	5025-0245	5025-0285	5	15	12.5
5025-0206	5025-0246	5025-0286	6	15	12.5
5025-0207	5025-0247	5025-0287	7	15	12.5
5025-0208	5025-0248	5025-0288	8	15	12.5
5025-0209	5025-0249	5025-0289	9	15	12.5
5025-0200	5025-0240	5025-0280	10	15	12.5



TITAN

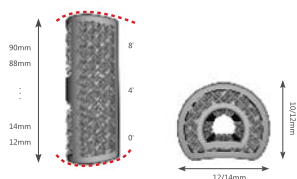
Artificial Vertebral Body

- The structure that imitates bone Trabecular Titanium. 80% porosity, 800±200µm pore size. Optimal cell migration and proliferation. Increased production of BMP and anti-inflammatory cytokines.
- Modulus of elasticity close to cancellous bone avoids stress shielding and bone resorption, prevents endplate collapse.
- Biocompatibility and reliable osseointegration.
- Porous surface provides excellent primary stability.

- Curved-shape design with maximum endplate contact, prevents endplate collapse.
- Cervical vertebra: Height 12-90mm, in 2mm increments; Diameter 12/14mm.
- Thoracic&Lumbar vertebra: Height 25-120mm, in 5/10mm increments; Diameter 12*18mm~18*24mm.
- 3 lordosis angles for multiple orthopedic designs.
- Preserved bone graft windows if bone graft is required.

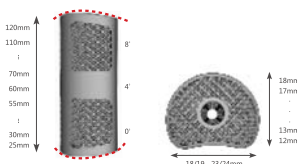
Cervical Vertebra

Angle	0°, 4°, 8°	
Height	12mm~90mm, in 2mm increment	
Specification	ML (mm)	AP (mm)
	12	10
	14	12



Thoracic&Lumbar Vertebra

Angle	0°, 4°, 8°	
Height	25mm~60mm, in 5mm increment 60mm~120mm, in 10mm increment	
Specification	ML (mm)	AP (mm)
	18	12
	19	13
	20	14
	21	15
	22	16
	23	17
	24	18



Hip System

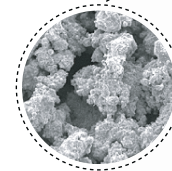
AK Femoral Stem

AK-ML-TP Femoral Stem

- Tapered Wedge design provides firm mediolateral stability within the femoral canal;
- Both 127° and 132° of Neck Shaft Angle are available;
- 24 sizes full length stem available in full profile and reduced distal options;
- Polished Anterior-Posterior Neck Flats increase ROM by geometrically reducing the potential for impingement of the neck with the cup;
- Flat Tapered Wedge Geometry Enhances proximal offloading and bone preservation and provides for rotational stability;
- Reduced Distal Transition Enhances implant fit in femoral canals with a proximal distal mismatch.



Tapered design provides maximum bone preservation



Proximal coating:
Titanium Plasma Spray



127 and 132 degree of neck shaft angle

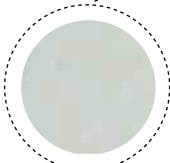
ML-TP Femoral Stem

AK-ML-TH Femoral Stem

- Proximal Coating: Titanium Plasma Spray + HA Coating;
- Tapered Wedge design provides firm mediolateral stability within the femoral canal;
- Both 127° and 132° of Neck Shaft Angle are available;
- 24 sizes full length stem available in full profile and reduced distal options;
- Polished Anterior-Posterior Neck Flats increase ROM by geometrically reducing the potential for impingement of the neck with the cup;
- Flat Tapered Wedge Geometry Enhances proximal offloading and bone preservation and provides for rotational stability;
- Reduced Distal Transition Enhances implant fit in femoral canals with a proximal distal mismatch.



Tapered design provides maximum bone preservation



Proximal coating: Titanium Plasma Spray and Hydroxyapatite Coating

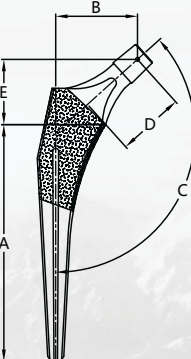


127 and 132 degree of neck shaft angle

ML-TH Femoral Stem

AK-ML-TP Femoral Stem (127°)

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length (A)	Offset (B)	Neck Length (D)	Neck Height (E)	Distal Dia.
1#	1100-3801	Name: AK-ML-TP Femoral Stem (127°)	127°	110	39	31	27	5
2#	1100-3802			115	40	31	27	7.5
2.5#	1100-3825			118	41	31	27	9
3#	1100-3803			120	45	36	30	10
3.5#	1100-3835	Customized Supplied		124	46	36	30	11
4#	1100-3804	Material: Titanium Alloy		125	47	36	30	12.5
4.5#	1100-3845			129	48	36	30	13.5
5#	1100-3805	Surface Coating: Ti. plasma spray		130	50	38	31	15
5.5#	1100-3855			133	50	38	31	16.5
6#	1100-3806	Taper: 12/14		135	51	38	31	17.5
7#	1100-3807			140	54	41	33	20
8#	1100-3808			145	56	41	33	22.5

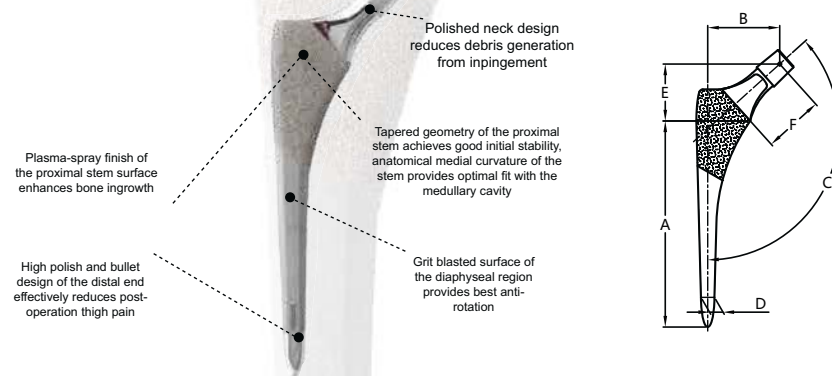


AK-ML-TP Femoral Stem (132°)

Size Ref.	Cat. No.	Discription	Neck Shaft Angle (C)	Stem Length (A)	Offset (B)	Neck Length (D)	Neck Height (E)	Distal Dia.	
1#	1100-2801	Name: AK-ML-TP Femoral Stem (132°)	132°	110	36	31	30	5	
2#	1100-2802			115	37	31	30	7.5	
2.5#	1100-2825			118	38	31	30	9	
3#	1100-2803			120	42	36	33	10	
3.5#	1100-2835			Regulary Supplied	124	42	36	33	11
4#	1100-2804				125	43	36	34	12.5
4.5#	1100-2845			Material: Titanium Alloy	129	44	36	34	13.5
5#	1100-2805				130	45	38	35	15
5.5#	1100-2855			Surface Coating: Ti.plasma spray	133	46	38	35	16.5
6#	1100-2806				135	47	38	35	17.5
7#	1100-2807	Taper: 12/14		140	50	41	37	20	
8#	1100-2808			145	51	41	37	22.5	

AK-MP-TP Femoral Stem

- MP stem is cementless designs developed following the classic tapered stem philosophy;
- Polished bullet-shape distal tip reduces distal stresses;
- MP stem is precision manufactured from high-strength forged titanium alloy and incorporate a 3-degree biplanar taper;
- Each stem has a medially rounded, laterally flared, proximal cross-sectional geometry that has been refined for optimal fit and fill and rotational stability.



AK-MP-TP Femoral Stem(132°)

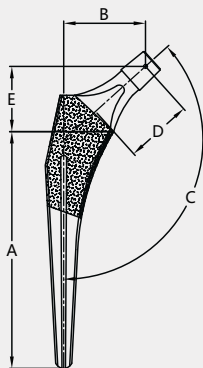
Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length (A)	Offset (B)	Neck Length (F)	Neck Height (E)	Distal Dia. (D)
7#	1100-2007	Name:AK-MP-TP Femoral Stem(132°)	132°	110	39	33	31	7
8#	1100-2008			115	39	33	31	8
9#	1100-2009			120	40	33	32	9
10#	1100-2020	Regularly Supplied		130	40	33	32	10
11#	1100-2011			130	42	35	34	11
12#	1100-2012	Material: Titanium Alloy		140	44	37	35	12
13#	1100-2013			150	45	38	36	13
14#	1100-2014	Surface Coating: Ti. plasma spray		150	45	39	37	14
				150	45	39	37	14
		Taper: 12/14						

AK-ML-TH Femoral Stem(127°)

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length (A)	Offset (B)	Neck Length (D)	Neck Height (E)	Distal Dia.
1#	1100-3201	Name:AK-ML-TH Femoral Stem(127°)	127°	110	39	31	27	5
2#	1100-3202			115	40	31	27	7.5
2.5#	1100-3225			118	41	31	27	9
3#	1100-3203			120	45	36	30	10
3.5#	1100-3235			124	46	36	30	11
4#	1100-3204			125	47	36	30	12.5
4.5#	1100-3245			129	48	36	30	13.5
5#	1100-3205			130	50	38	31	15
5.5#	1100-3255	Material: Titanium Alloy		133	50	38	31	16.5
6#	1100-3206	Surface Coating: Ti+HA plasma spray		135	51	38	31	17.5
7#	1100-3207	Taper: 12/14		140	54	41	33	20
8#	1100-3208			145	56	41	33	22.5

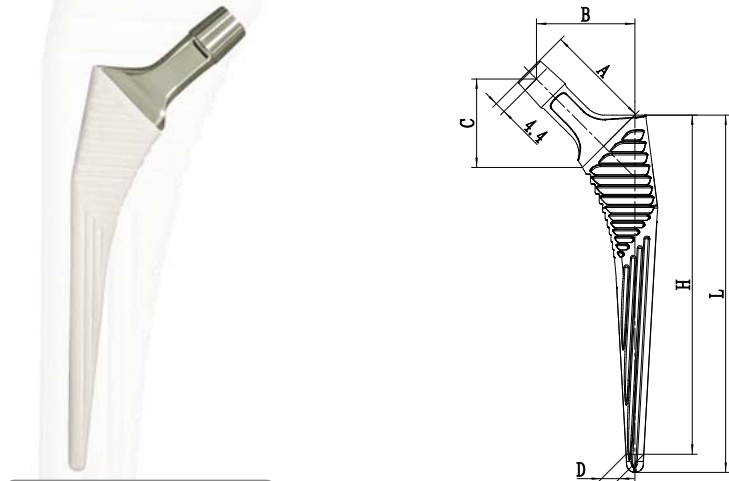
AK-ML-TH Femoral Stem(132°)

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length (A)	Offset (B)	Neck Length (D)	Neck Height (E)	Distal Dia.
1#	1100-3301	Name:AK-ML-TH Femoral Stem(132°)	132°	110	36	31	30	5
2#	1100-3302			115	37	31	30	7.5
2.5#	1100-3325			118	38	31	30	9
3#	1100-3303			120	42	36	33	10
3.5#	1100-3335			124	42	36	33	11
4#	1100-3304			125	43	36	34	12.5
4.5#	1100-3345			129	44	36	34	13.5
5#	1100-3305			130	45	38	35	15
5.5#	1100-3355	Material: Titanium Alloy		133	46	38	35	16.5
6#	1100-3306	Surface Coating: Ti+HA plasma spray		135	47	38	35	17.5
7#	1100-3307	Taper: 12/14		140	50	41	37	20
8#	1100-3308			145	51	41	37	22.5



AK-CL-TH Femoral Stem

- The CL stem gives primary mechanical stability with good optimum filling;
- Low-profile lateral shoulder design enables easy insertion in reduced incision techniques, especially the anterior approach;
- Double Coated stem with 50 µm pure titanium and 150 µm HA coating;
- CL hip system is manufactured from forged titanium alloy (Ti-6Al-4V) ensuring high fatigue resistance and biocompatibility;
- The double taper trapezoidal design resists axial and torsional displacement providing excellent stability;
- Metaphyseal flare ensures maximum fixation and load transfer into the proximal femur.

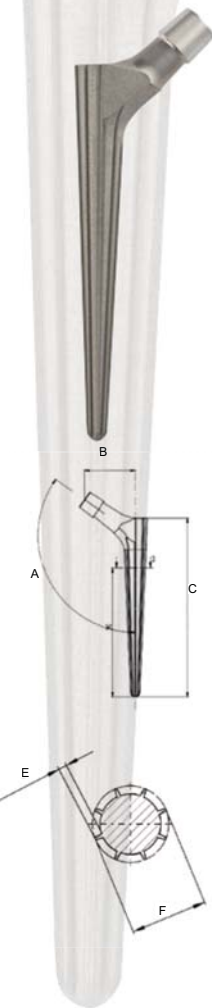


AK-CL-TH Femoral Stem(135°)

Size Ref.	Cat. No.	Description	Neck Shaft Angle	Neck Length (A)	Offset (B)	Neck Height (C)	Distal Dia. (D)	Stem Length (H)	Stem Length (L)
1#	1100-4201	Name:AK-CL-TH Femoral Stem(135°)	135°	35	31.8	30.3	5.4	109	115
2#	1100-4202			38	35.0	32.3	5.7	124	130
3#	1100-4203			41	38.1	34.5	6.6	134	140
4#	1100-4204	Regular Supplied		41	38.6	34.5	7.2	138	145
5#	1100-4205			41	39.6	34.5	8.6	143	150
6#	1100-4206	Material: Titanium Alloy		41	40.1	34.5	9.2	147	155
7#	1100-4207			41	40.6	34.5	9.5	153	160
8#	1100-4208	Surface Coating: HA plasma spray		41	41.6	34.5	10.9	158	165
9#	1100-4209			41	42.1	34.5	11.5	162	170
10#	1100-4210	Taper: 12/14		41	43.1	34.5	12.4	172	180
11#	1100-4211			41	44.1	34.5	13.4	181	190

AK-SL-Cone Femoral Stem

- Uncemented fixation based on the positive experience with the SL Revision Stem;
- CCD-angle of 125° and 135°;
- Conical shape with a cone angle of 5°;
- 8 Sharp longitudinal ribs;
- Free setting of antetorsion;
- Titanium alloy with a rough blasted surface (ProtasulTM-100);
- Stem Diameter from Φ 13 mm to Φ 23 mm;
- Designed for difficult bone conditions at the proximal end of the femur;
- Deformities of the femurs in which fixation of a standard prosthesis is difficult;
- Simple Revisions.



AK-SL-Cone Femoral Stem(125°)

Size Ref.	Cat. No.	Description	Neck Shaft Angle	Rib Height (E)	Distal Dia. (F)	Stem Dia. (D)	Offset (B)	Stem Length (C)
0#	1100-2900	Name:AK-SL-Cone Femoral Stem(125°)	125°	1	6.2	13	28	115
1#	1100-2901			1	6.4	14	32	125
2#	1100-2902			1	7.4	15	33	125
3#	1100-2903	Regularly Supplied		1.5	8.5	16	33	125
4#	1100-2904			1.5	9.5	17	34	125
5#	1100-2905	Material: Titanium Alloy		1.5	10.5	18	35	125
6#	1100-2906			2	11.6	19	36	125
7#	1100-2907	Surface Coating: Grit-blasted		2	12.6	20	37	125
8#	1100-2908			2	13.7	21	38	125
9#	1100-2909	Taper: 12/14		2	14.8	22	38	125
10#	1100-2910			2.5	15.8	23	39	125

AK-SL-Cone Femoral Stem(135°)

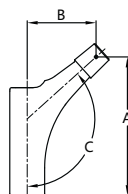
Size Ref.	Cat. No.	Description	Neck Shaft Angle	Rib Height (E)	Distal Dia. (F)	Stem Dia. (D)	Offset (B)	Stem Length (C)	
11#	1100-2911	Name:AK-SL-Cone Femoral Stem(135°)	135°	1	6.2	13	26	115	
12#	1100-2912			1	6.4	14	30	125	
13#	1100-2913			1	7.4	15	30	125	
14#	1100-2914			1.5	8.5	16	31	125	
15#	1100-2915	Regularly Supplied		1.5	9.5	17	32	125	
16#	1100-2916	Material: Titanium Alloy		1.5	10.5	18	33	125	
17#	1100-2917	Surface Coating: Grit-blasted		2	11.6	19	33	125	
18#	1100-2918			2	12.6	20	34	125	
19#	1100-2919			Taper: 12/14	2	13.7	21	35	125
20#	1100-2920				2	14.8	22	35	125
21#	1100-2921	2.5			15.8	23	36	125	

AK-MR Femoral Stem

- AK-MR Stem provides the opportunity to treat wide variances in patient anatomy, and allowing extensive fixation in the femur, this design philosophy in femoral revision surgery has been impressive. These results show the favorable remodeling of proximal femoral bone stock when excessive bone loss was present;
- AK-MR Stem were designed to achieve secure distal fixation in the femur using a sharply splined and tapered distal stem;
- The tapered distal stem is designed to wedge into the femoral medullary canal, transferring axial and bending forces, while the splines are press-fit into the bone to provide rotational stability;
- A bevel at the distal end of the stem is a design feature intended to increase the ease of insertion, to better accommodate the bow of the femur, and decrease the potential for distal femoral cortical perforation;
- Multiple sizes in each body type allow for metaphyseal filling, proximal fixation, and proximal support of the prosthesis.

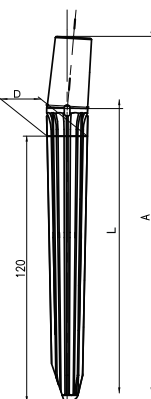
AK-MR Proximal Femoral Stem

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Proximal Stem Length (A)	Offset(B)
1#	1100-2501	Name:AK-MR Proximal Femoral Stem	132°	50	40
2#	1100-2502			60	40
3#	1100-2503	Regularly Supplied		70	40
4#	1100-2504	Material: Titanium Alloy		80	40
5#	1100-2505			90	40
6#	1100-2506	Surface: Grit-blasted		100	40
7#	1100-2507	Taper: 12/14		110	40



AK-MR Distal Femoral Stem

Size Ref.	Cat. No.	Description	ECC Angle	Stem Dia. (D)	Distal Stem Length (L)
Φ14×165	1300-1414	Name:AK-MR Distal Femoral Stem	4°	14	132
Φ14×225L	1300-1420L			14	192
Φ15×165	1300-1514			15	132
Φ15×225L	1300-1520L			15	192
Φ16×165	1300-1614	16		132	
Φ16×225L	1300-1620L	16		192	
Φ17×165	1300-1714	Regulatory Supplied		17	132
Φ17×225L	1300-1720L			17	192
Φ18×165	1300-1814	Material: Titanium Alloy		18	132
Φ18×225L	1300-1820L			18	192
Φ19×165	1300-1914	Surface: Grit- blasted		19	132
Φ19×225L	1300-1920L			19	192
Φ20×165	1300-2014	Taper: 12/14		20	132
Φ20×225L	1300-2020L			20	192
Φ22×165	1300-2214			22	132
Φ22×225L	1300-2220L			22	192



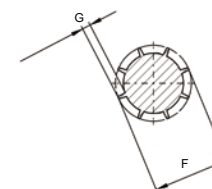
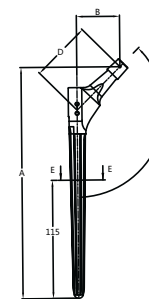
8 longitudinal ribs ensure the anti-rotational stability

AK-SL Femoral Stem

- Guaranteed distal fixation in used of Wagner principle;
- AK-SL stem designed for uncemented fixation in femoral revision surgery. A 2° tapered stem with a circular cross-section, the AK-SL can be placed in any version by the surgeon;
- AK-SL stem has 8 longitudinal ribs with relatively sharp ridges that are intended to engage the femoral cortex, thus enabling optimum rotational stability;
- AK-SL Stem length along with the secure fit of the taper design and the torsionally resistant ribs provide firm fixation to the healthy bone distal to the original prosthetic bed.



8 longitudinal ribs ensure the anti-rotational stability

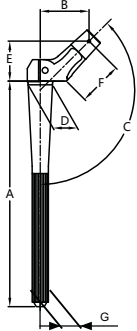
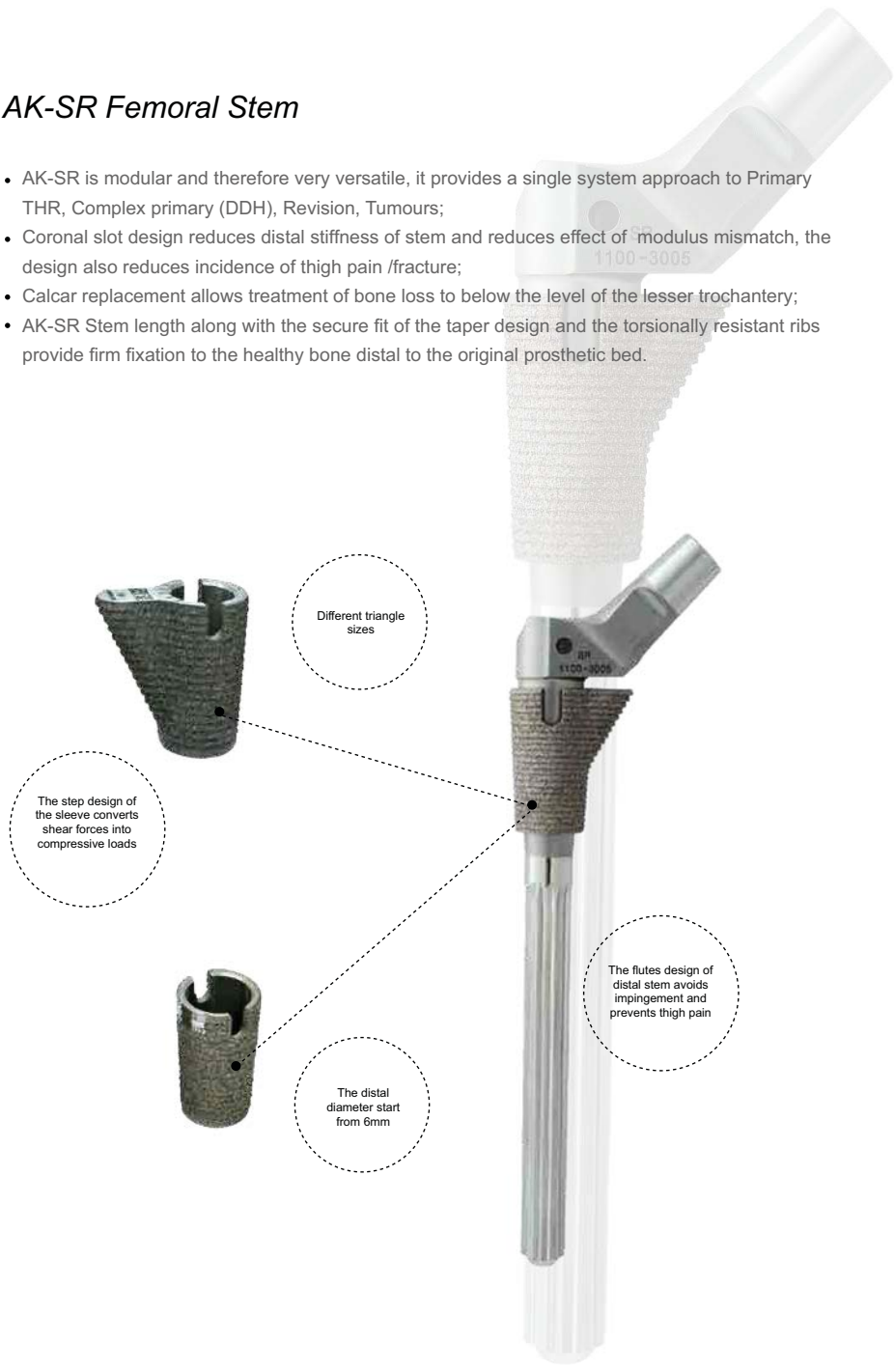


AK-SL Femoral Stem

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length (A)	Offset (B)	Stem Dia. (E)	Neck Length (D)	Distal Dia. (F)	Rib Height (G)
23#	1100-2923	Name:AK-SL Femoral Stem Material: Titanium Alloy Regularly Supplied Surface Coating: Grit-blasted Taper: 12/14	135°	190	42	14	59	10.3	1
24#	1100-2924			190	42	15	59	11.3	1.2
25#	1100-2925			190	42	16	59	12.3	1.3
26#	1100-2926			190	42	17	59	13.3	1.5
27#	1100-2927			190	44	18	62	14.4	1.6
28#	1100-2928			190	44	19	62	15.4	2
29#	1100-2929			190	44	20	62	16.4	2
32#	1100-2932			225	42	14	59	10.3	1
33#	1100-2933			225	42	15	59	11.3	1.2
34#	1100-2934			225	42	16	59	12.3	1.3
35#	1100-2935			225	42	17	59	13.3	1.5
36#	1100-2936			225	44	18	62	14.4	1.6
37#	1100-2937			225	44	19	62	15.4	2
38#	1100-2938			225	44	20	62	16.4	2
39#	1100-2939			225	44	21	62	17.4	2
40#	1100-2940			225	46	22	65	18.4	2

AK-SR Femoral Stem

- AK-SR is modular and therefore very versatile, it provides a single system approach to Primary THR, Complex primary (DDH), Revision, Tumours;
- Coronal slot design reduces distal stiffness of stem and reduces effect of modulus mismatch, the design also reduces incidence of thigh pain /fracture;
- Calcar replacement allows treatment of bone loss to below the level of the lesser trochantery;
- AK-SR Stem length along with the secure fit of the taper design and the torsionally resistant ribs provide firm fixation to the healthy bone distal to the original prosthetic bed.

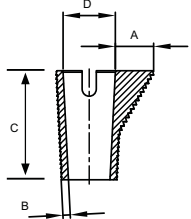


AK-SR Femoral Stem

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length (A)	Proximal Dia. (D)	Offset (B)	Neck Height (E) x Length (F)	Distal Dia. (G)
0#	1100-3000	Name:AK-SR Femoral Stem Material: Titanium Alloy Regularly Supplied Surface:Grit-blasted Taper: 12/14	135°	117.5	12	33	27 x 30	6
1#	1100-3001			117.5	12	33	27 x 30	7
2#	1100-3002			132.5	14	33	27 x 30	8
3#	1100-3003			132.5	14	33	27 x 30	9
4#	1100-3004			152.5	16	33	27 x 30	10
5#	1100-3005			152.5	16	33	27 x 30	11
6#	1100-3006			162.5	18	33	27 x 30	12
7#	1100-3007			162.5	18	33	27 x 30	13
8#	1100-3008			167.5	20	33	27 x 30	14
9#	1100-3009			167.5	20	33	27 x 30	15
10#	1100-3010			162.5	18	37	31 x 36	12
11#	1100-3011			162.5	18	37	31 x 36	13
12#	1100-3012			167.5	20	37	31 x 36	14
13#	1100-3013			167.5	20	37	31 x 36	15
14#	1100-3014			167.5	22	37	31 x 36	16
15#	1100-3015			167.5	22	37	31 x 36	17

The size of AK-SR Femoral Stem's Proximal Diameter (D) is matched with the AK-SR Femoral Stem Sleeve's Size Reference.

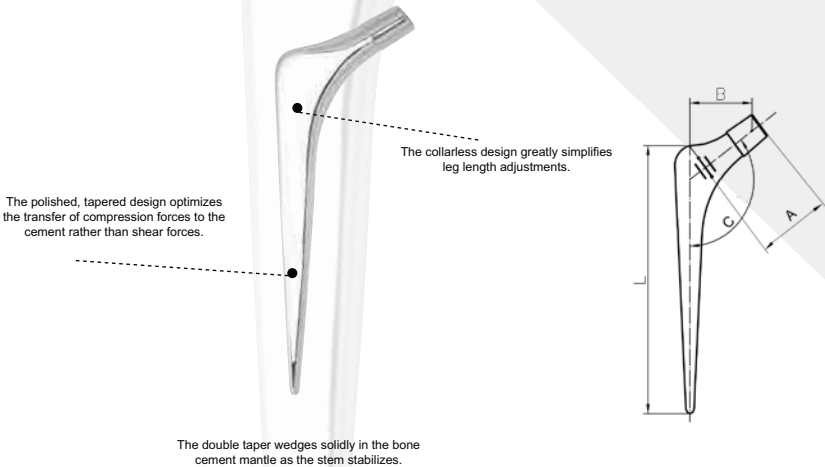
AK-SR Proximal Sleeve



Size Ref.	Cat. No.	Description	Spout (A)	Thickness (B)	Inner Dia. (D)	Height (C)
Φ12A	1301-12A	Name:AK-SR Proximal Sleeve Material: Titanium Alloy Regularly Supplied Surface: Titanium Plasma Spray Taper: 12/14	—	1.5	12	28
Φ12SB	1301-12SB		9.5	1.5	12	28
Φ12LB	1301-12LB		13.5	1.5	12	28
Φ12SD	1301-12SD		9.5	2.5	12	28
Φ12LD	1301-12LD		13.5	2.5	12	28
Φ14A	1301-14A		—	1.5	14	32.5
Φ14SB	1301-14SB		9.5	1.5	14	32.5
Φ14LB	1301-14LB		13.5	1.5	14	32.5
Φ14SD	1301-14SD		9.5	2.5	14	32.5
Φ14LD	1301-14LD		13.5	2.5	14	32.5
Φ16A	1301-16A		—	1.5	16	35.5
Φ16SB	1301-16SB		9.5	1.5	16	35.5
Φ16LB	1301-16LB		13.5	1.5	16	35.5
Φ16SD	1301-16SD		9.5	2.5	16	35.5
Φ16LD	1301-16LD		13.5	2.5	16	35.5
Φ18SB	1301-18SB		9.5	1.5	18	38.5
Φ18LB	1301-18LB		13.5	1.5	18	38.5
Φ18SD	1301-18SD		9.5	2.5	18	38.5
Φ18LD	1301-18LD		13.5	2.5	18	38.5
Φ20SB	1301-20SB		9.5	1.5	20	41.5
Φ20LB	1301-20LB		13.5	1.5	20	41.5
Φ20SD	1301-20SD		9.5	2.5	20	41.5
Φ20LD	1301-20LD		13.5	2.5	20	41.5
Φ22SB	1301-22SB		9.5	1.5	22	42.5
Φ22LB	1301-22LB		13.5	1.5	22	42.5
Φ22SD	1301-22SD		9.5	2.5	22	42.5
Φ22LD	1301-22LD		13.5	2.5	22	42.5

CPII Cemented Femoral Stem

- Double tapered stem design helps to create radial compressive loading ;
- Additional stability and support for distal femoral defects;
- Increasing compression and reducing shear at the bone/cement and implant/cement interfaces;
- Polished surface helps to reduce friction between the cement and the implant reducing potential for third body wear;
- Collarless neck helps to facilitate adjustments, allow intraoperative leg length adjustment aided by reference points on both the stem and the rasp.

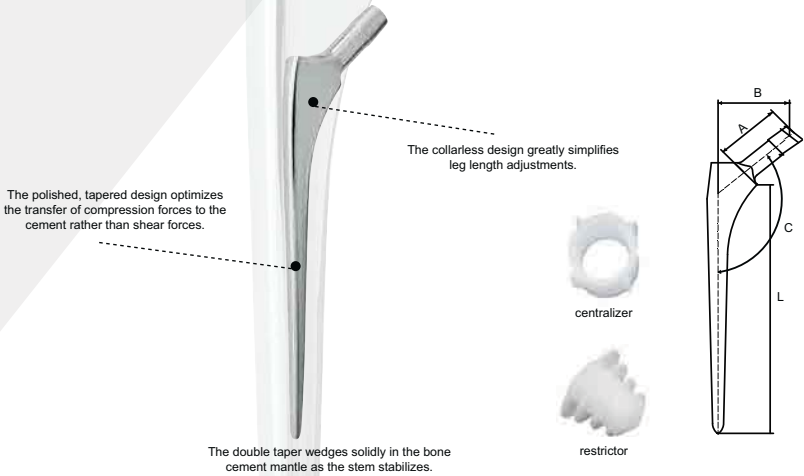


CPII Cemented Femoral Stem

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length (L)	Offset (B)	Neck Length (A)	Distal Dia.
00#	2100-1100	Name:CPII Cemented Femoral Stem Customized Supplied Material: High Nitrogen Stainless Steel Surface: High Polished Taper: 12/14	127°	115	30	42	5
0#	2100-1000			133	33	45	5
1#	2100-1001			149	35.5	49	5.5
2#	2100-1002			170	37.5	51	6
3#	2100-1003			170	37.5	51	6
4#	2100-1004			170	37.5	51	152
5#	2100-1005			170	37.5	51	151
6#	2100-1006			171	37.5	51	151
7#	2100-1007			168	40	54	149
8#	2100-1008			168	40	54	148
9#	2100-1009			168	40	54	148
10#	2100-1010			168	40	54	148
11#	2100-1011			169	40	54	147

ACP and ACP Long Cemented Femoral Stems

- Double-taper design philosophy provides natural compressive forces to help ensure that the implant is firmly seated and wedged within the cement mantle;
- Polished surface designed to work in conjunction with taper geometry to enhance stem stability;
- Polished, tapered design intended to stabilize through controlled subsidence in the first 12 to 24 months.



ACP Cemented Femoral Stem

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length L(mm)	Offset (B)	Neck Length (A)	Distal Dia.
00#	1100-1100	Name: ACP Cemented Femoral Stem	132°	105	32.5	32	5
0#	1100-1000	Regulary Supplied		110	37	37	5
1#	1100-1001	Material: Co-Cr-Mo		115	37	37	5.5
2#	1100-1002	Surface: High Polished		115	39	37	6
3#	1100-1003	Taper: 12/14		120	42	39	6

ACP Long Cemented Femoral Stem

Size Ref.	Cat. No.	Description	Neck Shaft Angle (C)	Stem Length L(mm)	Offset (B)	Neck Length (A)	Distal Dia.
4#(M)	1100-1004	Name: ACP Long Cemented Femoral Stem	132°	170	44	41	5
5#(L)	1100-1005	Regulary Supplied		200	45	42	5
14#(XS)	1100-1014	Material: Co-Cr-Mo		150	37.5	37	5
15#(S)	1100-1015	Surface: High Polished Taper: 12/14		160	38	37	5

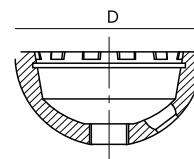
AK-AC-II-TP Acetabular Cup

- AK-AC-II-TP system is a two pieces component design that is assembled during surgery;
- The shells utilize the innerchange locking mechanism. This unique locking mechanism helps provide a secure interface between the polyethylene insert and shell;
- The shell is also suitable for both HXLPE and Ceramic Liner.



AK-AC-II-TP Acetabular Cup

Size Ref. (O.D./I.D.)	Cat. No.	Description	Matched Liner size (O.D./I.D.)	Matched Liner size (O.D./I.D.)	Matched Liner size (O.D./I.D.)	Matched Femoral Head Diameter
38/32	A2438-3832	Name:AK-AC-II-TP Acetabular Cup	32/22	-	-	22
40/32	A2438-4032		32/22	-	-	22
42/34	A2438-4234		34/22	-	-	22
44/36	A2438-4436	Material: Titanium Alloy Regularly Supplied	36/22	-	-	22
46/38	A2438-4638		38/28	-	-	28
48/40	A2438-4840	Surface Coating: Titanium Plasma Spray Porous Coating from UK	40/28	-	-	28
50/42	A2438-5042		42/28	42/32	-	28/32
52/44	A2438-5244		44/28	44/32	-	28/32
54/46	A2438-5446	Matched Liner: AK-L-II Liner UHMWPE	46/28	46/32	46/36	28/32/36
56/48	A2438-5648		48/28	48/32	48/36	28/32/36
58/50	A2438-5850	Matched Stem: AK-ML-TP, AK-ML-TH, AK-MP-TP, AK-MF, AK-MR, AK-SL, AK- SL-CONE	50/28	50/32	50/36	28/32/36
60/52	A2438-6052		52/28	52/32	52/36	28/32/36
62/54	A2438-6254		54/28	54/32	54/36	28/32/36
64/54	A2438-6454		54/28	54/32	54/36	28/32/36



Acetabular System

AK-AC-I-TP Acetabular Cup with Liner

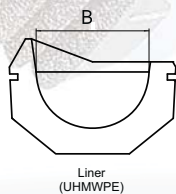
- Forged Titanium Alloy Cup and UHMWPE Liner;
- Titanium-Plasma Spray porous coating;
- Taper-lock mechanism ensures durable fixation;
- High edge liner design effectively prevents dislocation;
- 3 holes allows immediate screw fixation.

Three holes design
ensures immediate
fixation

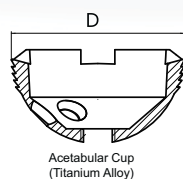
10-degree high wall
design prevents
dislocation during
motion.

AK-AC-I-TP Acetabular Cup with Liner

Size Ref.	Cat. No.	Description	Cup Diameter (D)	Matched Femoral Head
42/22	1300-2242	Name:AK-AC-I-TP Acetabular Cup with Liner	43	22
44/22	1300-2244		45	22
46/22	1300-2246		47	22
48/28	1300-2848		49	28
50/28	1300-2850		51	28
52/28	1300-2852		53	28
54/28	1300-2854		55	28
56/28	1300-2856		57	28
58/28	1300-2858		59	28
60/28	1300-2860		61	28
62/28	1300-2862	Material: Titanium Alloy+UHMWPE Liner Regularly Supplied	63	28
52/32	1300-52DZ	Surface Coating: Titanium Plasma Spray Porous Coating	53	32
54/32	1300-54DZ		55	32
56/32	1300-56DZ		57	32
58/32	1300-58DZ		59	32
60/32	1300-60DZ		61	32
62/32	1300-62DZ	Matched Stem: AK-ML-TP, AK-ML-TH, AK-MP-TP, AK-MF, AK-MR, AK-SL, AK- SR	63	32



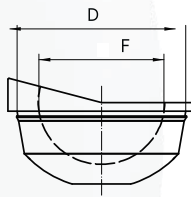
Liner
(UHMWPE)



Acetabular Cup
(Titanium Alloy)

AK-L-II-Liner

- Both highly cross-linked Polyethylene and UHMWPE are available;
- The liners are designed to lock into the shell by means of a circumferential ring that engages the shell's mating groove;
- Rotational stability may be achieved when the shell's anti-rotational barbs interlock with the insert's scallops.



AK-L-II-Liner UHMWPE

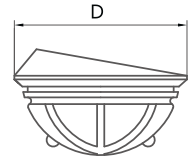
Size Ref.	Cat. No.	Description	Matched Cup's Inner Dia.	Matched Femoral Head
32/22	2327-3222	Name:AK-L-II-Liner UHMWPE Material: UHMWPE(Ultrahigh molecular weight polyethylene) Regularly Supplied	32	22
34/22	2327-3422		34	22
36/22	2327-3622		36	22
38/28	2327-3828		38	28
40/28	2327-4028		40	28
42/28	2327-4228		42	28
44/28	2327-4428		44	28
46/28	2327-4628		46	28
48/28	2327-4828		48	28
50/28	2327-5028		50	28
52/28	2327-5228		52	28
54/28	2327-5428		54	28
42/32	2327-4232		42	32
44/32	2327-4432		44	32
46/32	2327-4632		46	32
48/32	2327-4832		48	32
50/32	2327-5032	Mached Cup: AK-AC-II-TP AK-AC-II-TTM-I AK-AC-II-TTM-V	50	32
52/32	2327-5232		52	32
54/32	2327-5432		54	32
46/36	2327-4636		46	36
48/36	2327-4836		48	36
50/36	2327-5036		50	36
52/36	2327-5236		52	36
54/36	2327-5436		54	36

AK-L-II-Liner HXLPE

Size Ref.	Cat. No.	Description	Matched Cup's Inner Dia.	Matched Femoral Head
32/22	2329-3222	Name:AK-L-II-Liner HXLPE Material: HXLPE (High Cross Linked Polyethylene) Customized Supplied	32	22
34/22	2329-3422		34	22
36/28	2329-3628		36	28
38/28	2329-3828		38	28
40/32	2329-4032		40	32
42/32	2329-4232		42	32
44/32	2329-4432		44	32
46/32	2329-4632		46	32
48/32	2329-4832		48	32
50/32	2329-5032		50	32
52/32	2329-5232		52	32
54/32	2329-5432		54	32
58/32	2329-5832	Mached Cup: AK-AC-II-TP AK-AC-II-TTM-I AK-AC-II-TTM-V	58	32
60/32	2329-6032		60	32
44/36	2329-4436		44	36
46/36	2329-4636		46	36
48/36	2329-4836		48	36
50/36	2329-5036		50	36
52/36	2329-5236		52	36
54/36	2329-5436		54	36
58/36	2329-5836		58	36
60/36	2329-6036		60	36

CP II Acetabular Cup

- UHMWPE;
- Monoblock cutting;
- 10 degree high wall design prevents dislocation during motion.



AK CP II Acetabular Cup

Size Ref.	Cat. No.	Description	Cup Diameter (D)	Matched Femoral Head Dia.
38/22	2300-1038	Name: AK CP II Acetabular Cup Material: UHMWPE(Ultrahigh molecular weight polyethylene) Regularly Supplied	36	22
40/22	2300-1040		38	22
42/22	2300-1042		40	22
44/28	2300-1044		42	28
46/28	2300-1046		44	28
48/28	2300-1048		46	28
50/28	2300-1050		48	28
52/28	2300-1052		50	28
54/28	2300-1054		52	28
56/28	2300-1056		54	28
58/28	2300-1058		56	28
60/28	2300-1060		58	28
62/28	2300-1062		60	28

CP Acetabular Cup

- UHMWPE;
- Monoblock cutting;
- 10 degree high wall design prevents dislocation during motion.



AK-CP Acetabular Cup

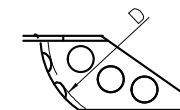
Size Ref.	Cat. No.	Description	Cup Diameter (D)	Matched Femoral Head Dia.
44/28	1300-1044	Name: AK-CP Acetabular Cup Material: UHMWPE(Ultrahigh molecular weight polyethylene) Regularly Supplied	44	28
46/28	1300-1046		46	28
48/28	1300-1048		48	28
50/28	1300-1050		50	28
52/28	1300-1052		52	28
54/28	1300-1054		54	28
56/28	1300-1056		56	28
58/28	1300-1058		58	28

Acetabular Cage

- Pure titanium is extremely pliable, making it easy to use. The rough-blasted bone-facing surface offers excellent compatibility and enhances bone ongrowth;
- The relative position and orientation of the flanges match the anatomy of the pelvis, so the flanges require less time- consuming adaptation;
- The optimized position and orientation of the screw holes bring the screws in line with the direction of the force applied for secure initial, and long-term, stability. The large number of screw holes allows the surgeon to choose the most reliable fixation option;
- Inferior narrowing of the cage's posterior rim means that intact bone of the posterior acetabular rim can be preserved;
- The slim, pointed, upwardly curved inferior flange is designed specially for the modern technique of impacting the implant into the os ischium. Its lower placement offers optimal positioning of the center of rotation.



AK-CAGE-S1 Standard
Acetabular Metal Cup Cage



AK-RING-S1 Standard
Acetabular Metal Cup Ring

AK-CAGE-S1 Standard Acetabular Metal Cup Cage

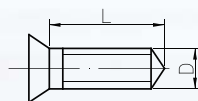
Size Ref.	Cat. No.	Description	Dia.(D)
50#	1330-1050	Name:AK-CAGE-S1 Standard Acetabular Metal Cup Cage	50
54#	1330-1054		54
58#	1330-1058	Material: Ti-Alloy	58

AK-RING-S1 Standard Acetabular Metal Cup Ring

Size	Cat. No.	Description	Dia.(D)
50#	1331-1050	Name:AK-RING-S1 Standard Acetabular Metal Cup Ring	50
54#	1331-1054		54
58#	1331-1058	Material: Ti-Alloy	58

Acetabular Cup Screw

- It is made of Ti-Alloy;
- Various sizes for different needs.



Acetabular Cup Screw

Size Ref.	Cat. No.	Description	Length (mm)	Dia.
15mm	1300-2015	Name: Acetabular Cup Screw Material: Titanium Alloy	15	6.5
20mm	1300-2020		20	6.5
25mm	1300-2025		25	6.5
30mm	1300-2030		30	6.5
35mm	1300-2035		35	6.5
40mm	1300-2040		40	6.5
45mm	1300-2045		45	6.5
50mm	1300-2050		50	6.5
55mm	1300-2055		55	6.5
60mm	1300-2060		60	6.5
65mm	1300-2065		65	6.5
70mm	1300-2070		70	6.5

Centralizer

Size Ref.	Cat. No.	Description	Inner Dia.	Outer Dia.
Universal	1100-C	Centralizer Material: UHMWPE	8	10.5



Restrictor

Size Ref.	Cat. No.	Description	Inner Dia.	Outer Dia.
Universal	1100-P	Restrictor Material: UHMWPE	3	9



AK-Bipolar

- Co-Cr-Mo Alloy Cup and UHMWPE Liner;
- Patent locking mechanism ensures easy femoral head installation and prevents dislocation.

AK-Bipolar

Size Ref.	Cat. No.	Description	Dia.	Matched Femoral Head
38/22	1220-3822	Name:AK-Bipolar	38	22
40/22	1220-4022		40	22
42/22	1220-4222		42	22
44/22	1220-4422		44	22
46/28	1220-4628		46	28
48/28	1220-4828		48	28
50/28	1220-5028		50	28
52/28	1220-5228		52	28
54/28	1220-5428		54	28
56/28	1220-5628		56	28
41/22	A2361-4122(1)	Material:Co-Cr-Mo Alloy Cup+UHMWPE Liner Regulatory Supplied Matched Head: For All 22 and 28	41	22
42/28	A2361-4228(1)		42	28
43/22	A2361-4322(1)		43	22
43/28	A2361-4328(1)		43	28
44/28	A2361-4428(1)		44	28
45/28	A2361-4528(1)		45	28
47/28	A2361-4728(1)		47	28
49/28	A2361-4928(1)		49	28
51/28	A2361-5128(1)		51	28
53/28	A2361-5328(1)		53	28

Accessories

Bone Cement Applicator

Bone cement applicator is the third generation cement technic which is designed to inject cement into intramedullary. This instrument may evenly inject cement into femur during hip joint replacement surgery.

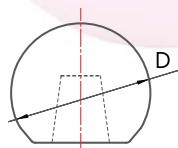


Femoral Head

AK-FH-C Femoral Head

AK-FH-C Femoral Head

Size Ref.	Cat. No.	Description	Dia.	Trade Mark
28-S	2202-0028	Name: AK-FH-C Femoral Head	28	BIOLOX from CeramTec
28-M	2202-0128		28	
28-L	2202-0228		28	
32-S	2202-0032		32	
32-M	2202-0132	Material: Ceramic Delta Customized Supplied	32	
32-L	2202-0232		32	
32-XL	2202-0332	Matched Stem: AK-ML-TP, AK-ML-TH, AK-MP-TP, AK-MF, AK-MR, AK-SR, AK-SL, AK-CL, AK-SL-CONE	32	
36-S	2202-0036		36	
36-M	2202-0136		36	
36-L	2202-0236		36	
36-XL	2202-0336		36	

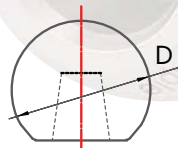


AK-FH-M Femoral Head

- Co-Cr-Mo Alloy material;
- 22mm, 28mm, 32mm, 36mm diameter options;
- Different neck lengths are available.

AK-FH-M Femoral Head

Size Ref.	Cat. No.	Description	Dia.	Matched Head Trial
22/0	1200-0122	Name:AK-FH-M Femoral Head	22	22/0
22/+4	1200-0222		22	22/+4
28/-4	1200-0028		28	28/-4
28/0	1200-0128		28	28/0
28/+4	1200-0228	Material:Co-Cr-Mo Alloy Regulatory Supplied	28	28/+4
28/+8	1200-0328		28	28/+8
32/-4	1200-0032	Matched Stem: AK-ML-TP, AK-ML-TH, AK-MP-TP, AK-MF, AK-MR, AK-SL, AK-SR, AK-CL, AK-SL-CONE, ACP, ACP Long	32	32/-4
32/0	1200-0132		32	32/0
32/+4	1200-0232		32	32/+4
36/-4	1200-0036		36	36/-4
36/0	1200-0136		36	36/0
36/+4	1200-0236		36	36/+4



Bone Cement Application Kit

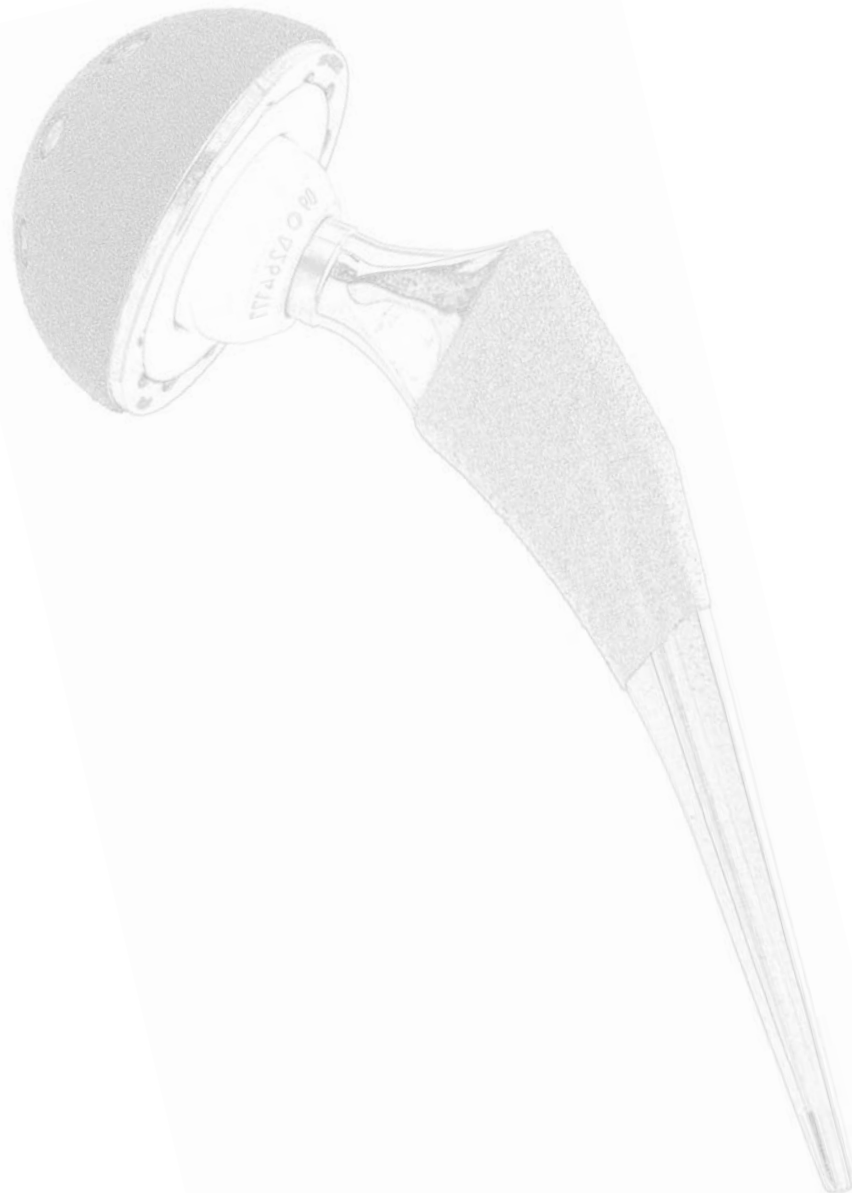


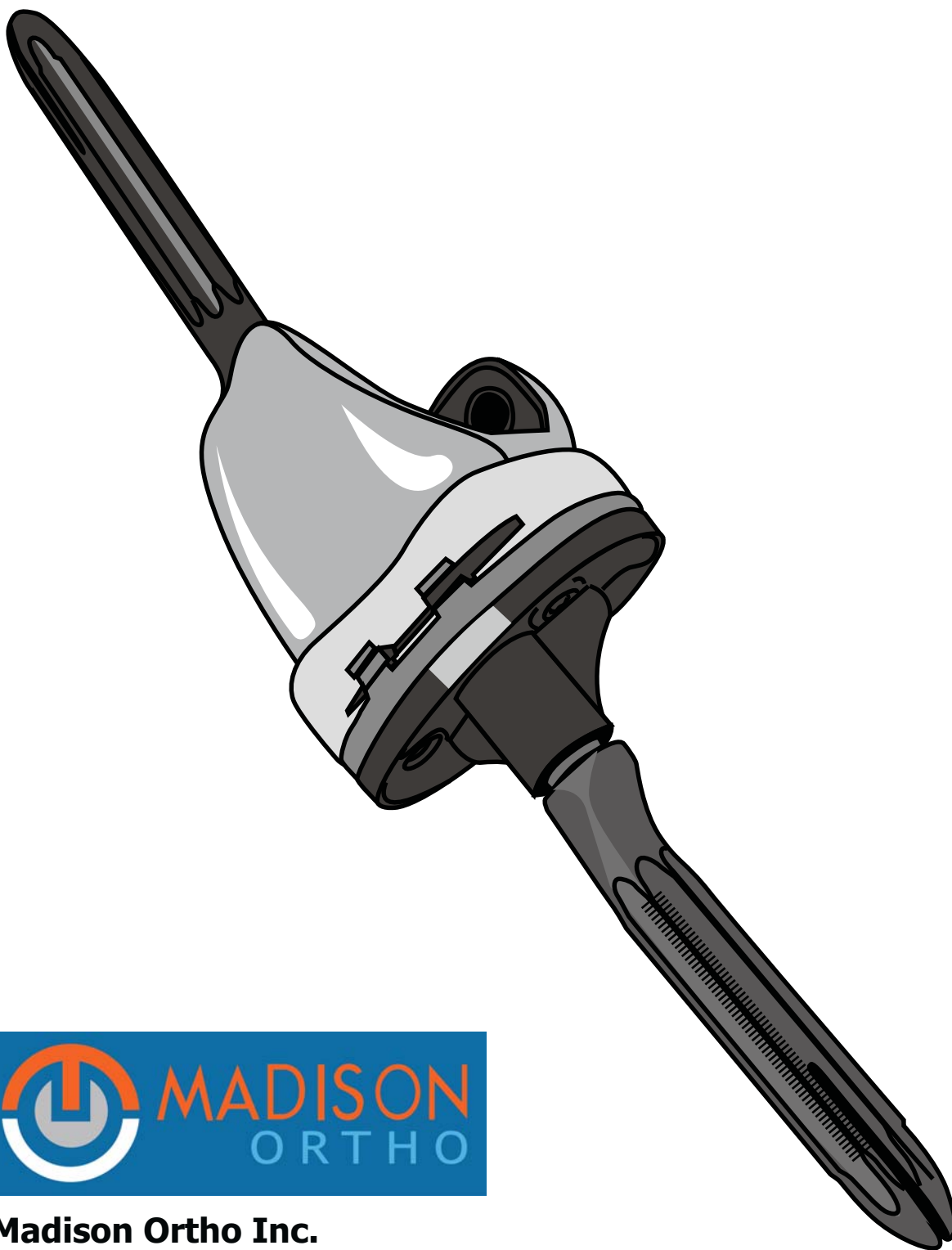
The plastic made cement sleeve assemblies are disposable for keeping bone cement. The system of devices may reduce possibilities of microbial contamination of the bone cement; also reduce the release of monomer vapors into environment; optimize mixing of the cement and make it possible for obtaining high and low viscosity cement.

Tornado Disposable Surgical Lavage Unit

Tornado Disposable Surgical Lavage Unit is a high quality, single use high pressure pulse lavage system for arthroplasty surgery. The product was developed with the specific requirements of surgeons in mind.

Tornado Disposable Surgical Lavage Unit is a ready-to-use product for joint arthroplasty and trauma surgery. The system is pre-packed with irrigation and suction nozzles which are customized for the respective usage area. The purpose is to give the surgeon different options to choose from, depending on what kind of surgery he/she will perform.





Madison Ortho Inc.

Address:

1660 Calle Santa Ana

Esquida Fidalgo Diaz

San Juan PR 00909-2309

Website: www.madisonorthoinc.com

E-mail: restrella@madisonorthoinc.com

Tel: 787 945 5800

Fax: 787 725 4688