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Double Medical



JOINT PRODUCT CATALOG



JOINT
DOUBLE MEDICAL

Edition 202609

DOUBLE MEDICAL

A leading giant in China's medical device industry

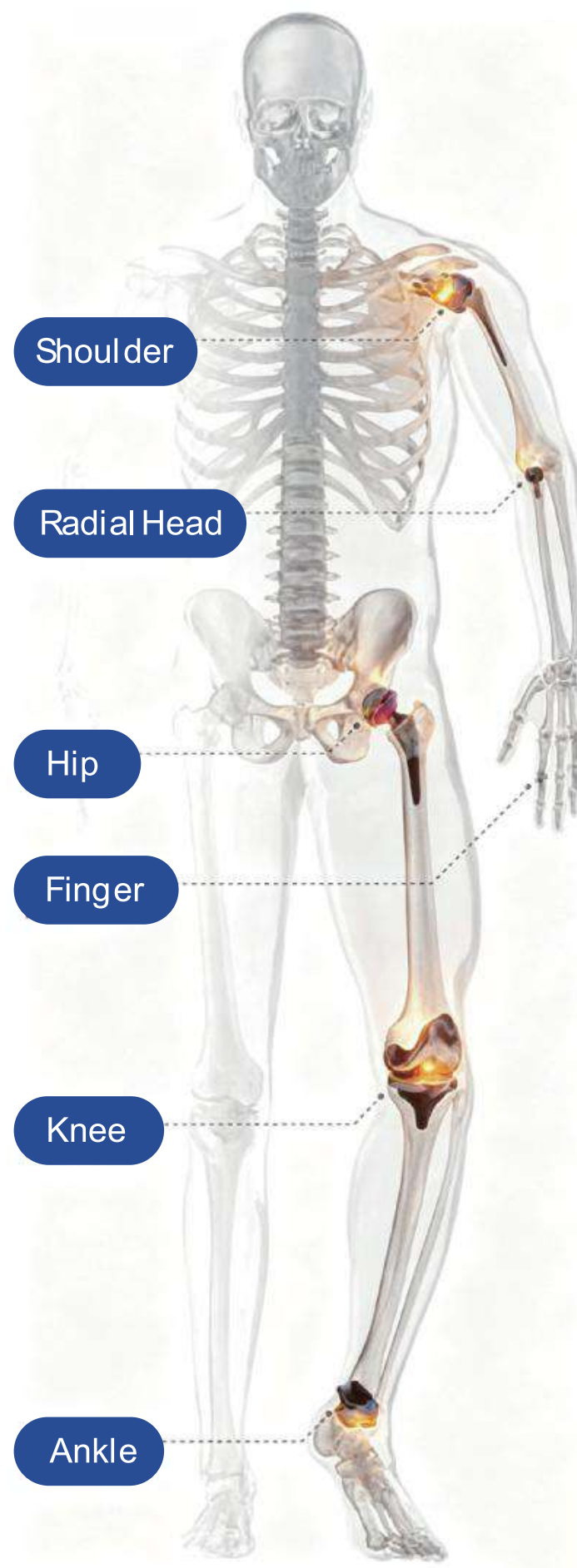
aspiring to become a world-class comprehensive medical product supplier.



Double Medical Technology Inc., founded in 2004 and headquartered in Xiamen, China, is a comprehensive medical enterprise primarily engaged in the R&D, production, sales, and service of medical products. Its business areas cover orthopedics, minimally invasive surgery, neurosurgery, maxillofacial surgery, chest wall surgery, hernia surgery, wound repair surgery, dentistry, spinal endoscopy minimally invasive surgery, and regenerative medicine. The company was listed on the Shenzhen Stock Exchange in 2017 (stock code: 002901).



Comprehensive Replacement Solutions



Covering all stages

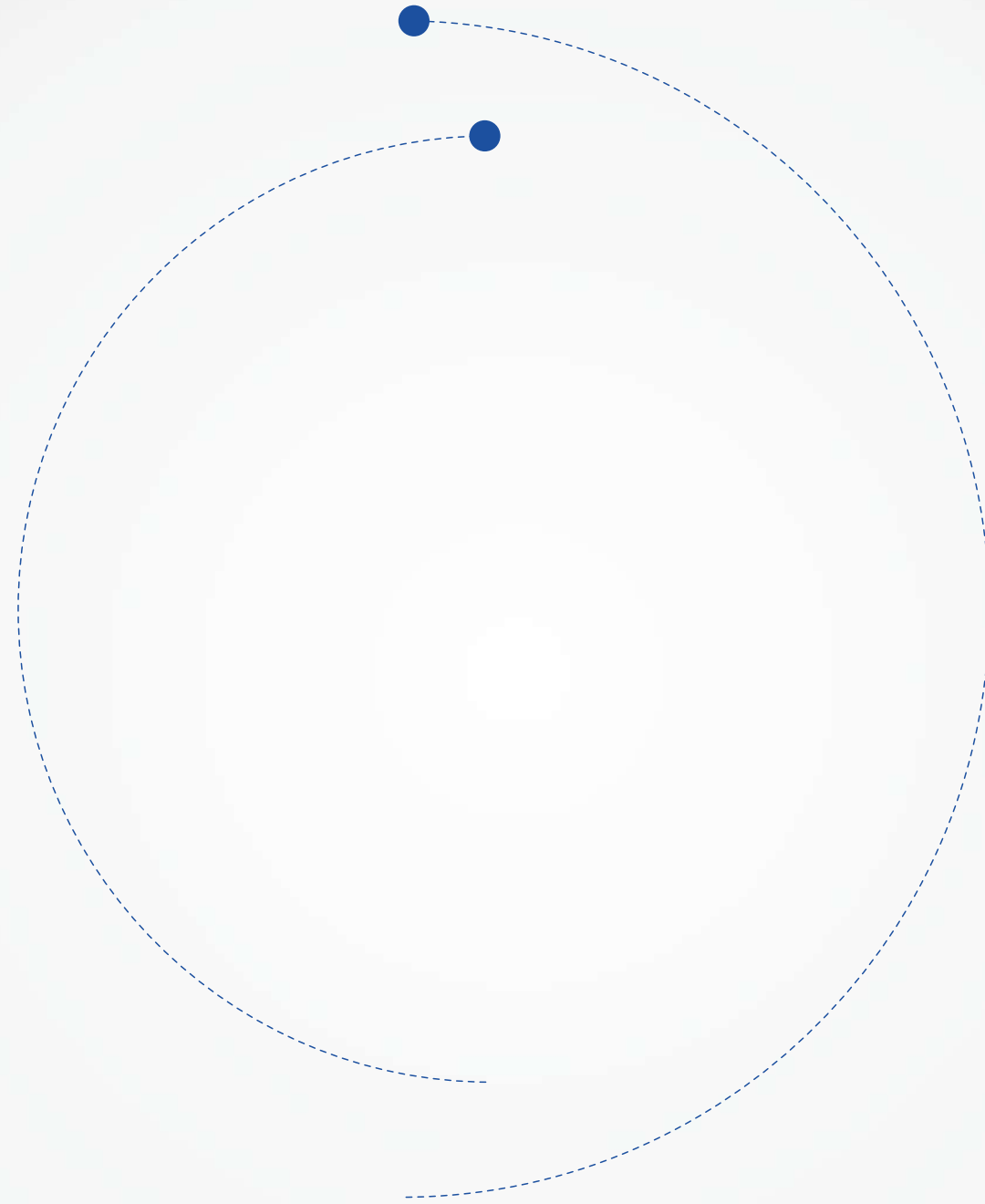
PRIMARY

REVISION

SEGMENTALS

Coming Soon

01 — Hip

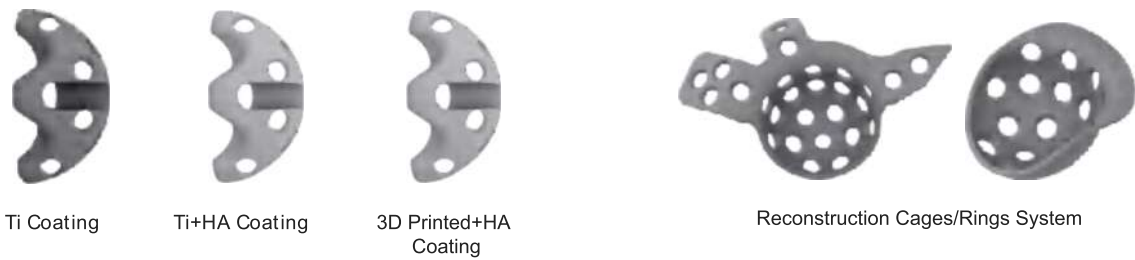


Hip Implant Portfolio



Apollo Cup System

Amity A Revision Acetabular Cup System



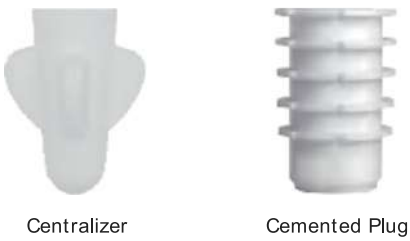
Acetabular Augment System



Apollo Liner System



Dual Mobility Bearing System



Alter/Viaxis Cementless Stem System

PBG Cementless Stem System



TBG Stem System

Anty F Revision Cementless Stem System PBG Revision Cemented Stem System

Hip Stem System Design Rationale



Optimized Sizing Rationale

The neck length of the DOUBLE MEDICAL stem is optimized based on global X-ray data, varying according to stem size to accommodate a broader range of patients. All DOUBLE MEDICAL stem neck lengths increase proportionally with size, which facilitates tissue tension, leg length adjustment, and inventory reduction. All DOUBLE MEDICAL femoral heads feature a 12/14 taper.



Better Range of Motion

DOUBLE MEDICAL hip system increase the postoperative range of motion by improving the size and structure of acetabulum and femoral neck. Test results show that it allows for up to 152° range of motion when coupled with 52mm cup and 36mm femoral head.



Double Medical offers a comprehensive range of femoral stem designs within its hip arthroplasty system, specifically developed to address the varied anatomical characteristics and clinical requirements encountered in joint replacement surgery.

In clinical practice, the availability of a broad and well-categorized stem portfolio is critical to achieving an optimal intraoperative fit—whether addressing differences in femoral medullary canal morphology, variations in bone quality, or preferences for cementless versus cemented fixation techniques.

One Broach For All

The broach for a single hip stem system is compatible with both cementless and cemented stem options, using the same broach size as marked for the final implant, thereby streamlining the surgical procedure.

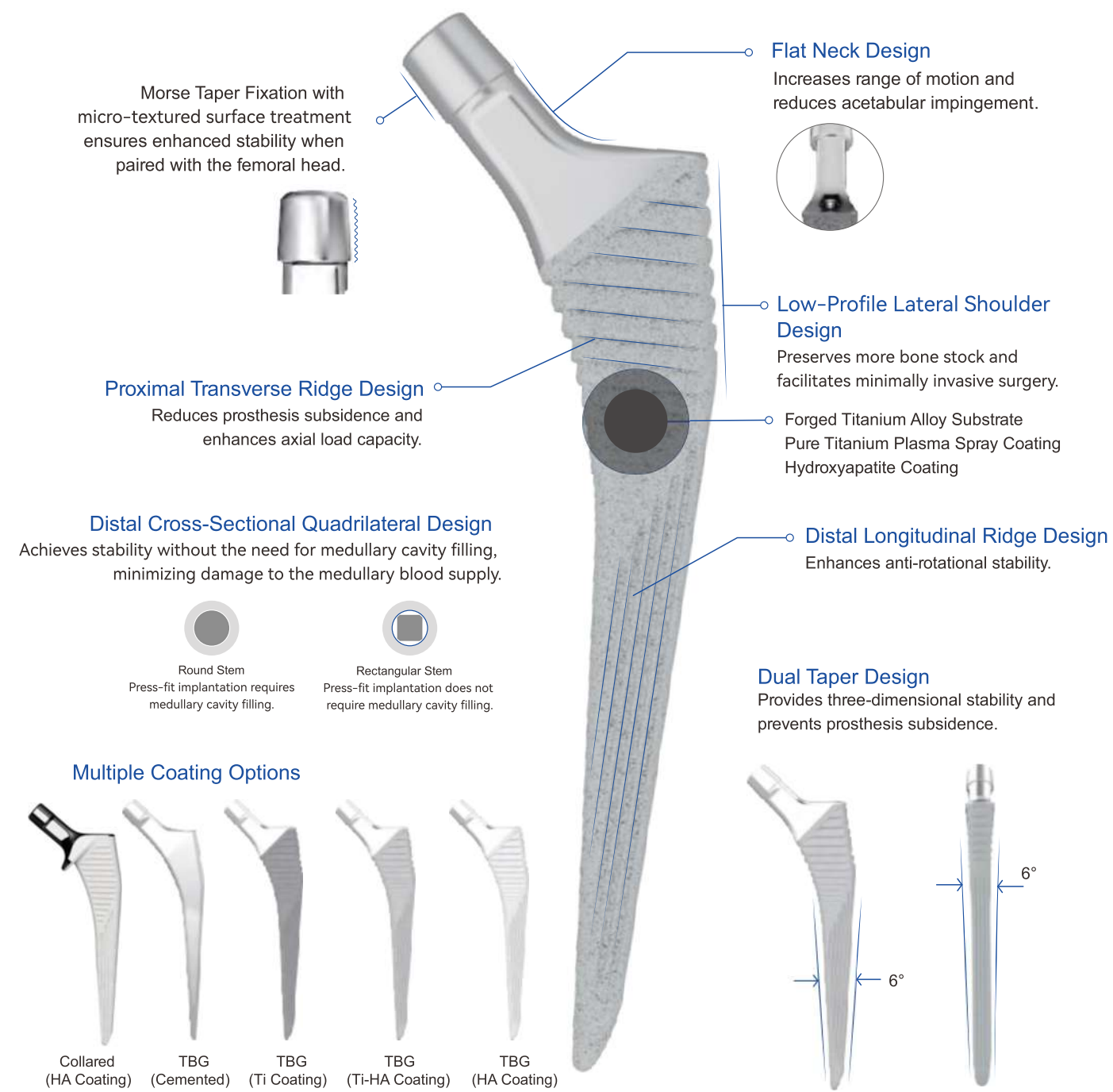


Preventing Subsidence and Facilitating Minimally Invasive Surgery

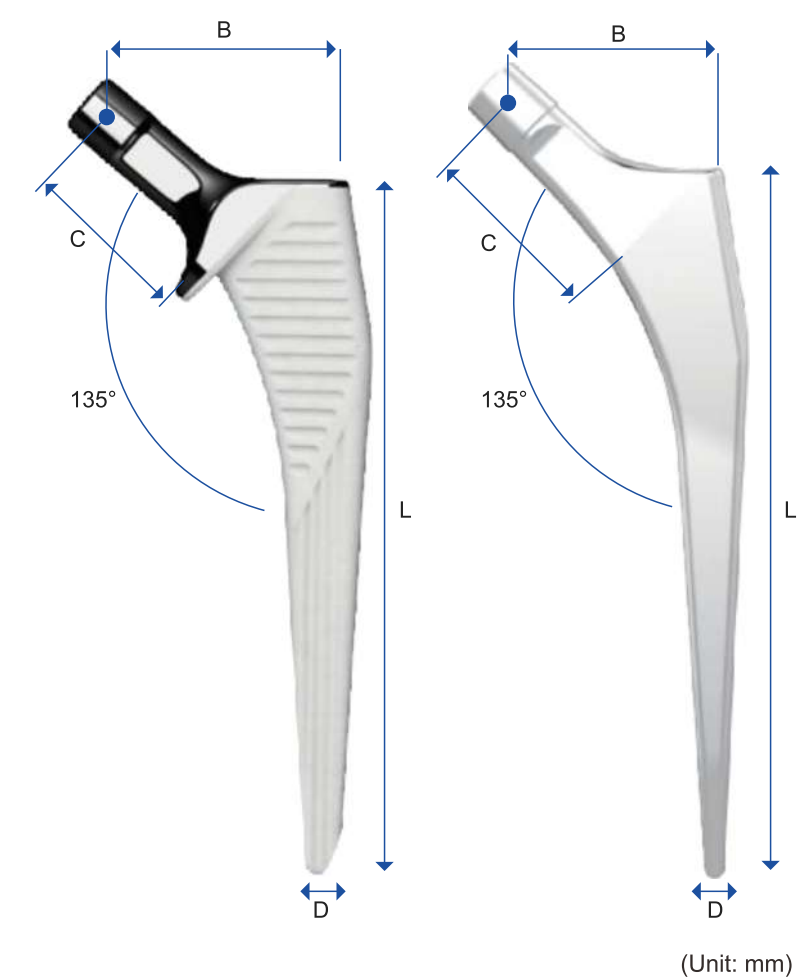
Double Medical's collared femoral stem provides calcar support to prevent subsidence and enhance primary stability. The collar also enables precise depth control, reducing excessive reaming—an advantage in minimally invasive surgery (MIS) by allowing smaller incisions, better soft tissue preservation, and accurate positioning under limited visibility. Additionally, close collar-bone apposition may reduce stress shielding and promote proximal bone ingrowth for long-term fixation.



TBG Hip Stem System



Specification



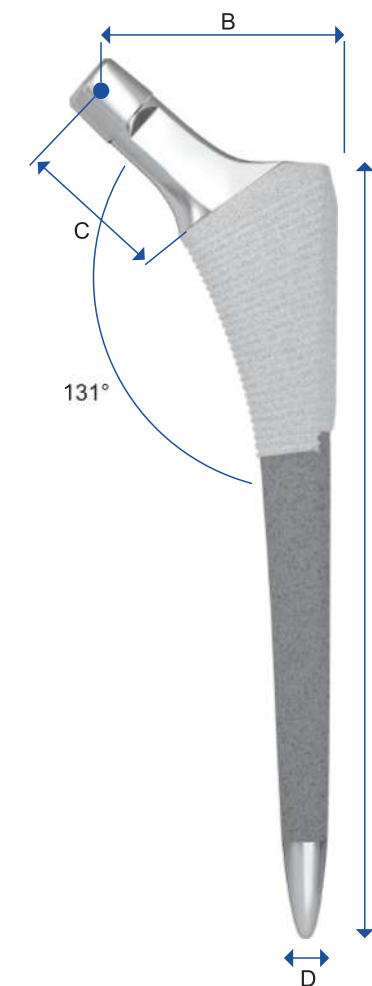
Specification	Offset (B)	Neck Length (C)	Distal Dia. (D)	Stem Length (L)	Centralizer
1#	35	33	4.5	115	XX
2#	36	33	6	130	XX
3#	37	35	7.5/5*	140/133*	8
4#	38	35	9/6*	146/137*	10
5#	39	37	10.5/7*	151/144*	12
6#	40	37	11.5/7*	155/148*	12
7#	41	39	12.5/8*	160/153*	14
8#	42	39	13.5/9*	165/158*	14
9#	43	41	14.5/10*	170/163*	14
10#	44	41	15.5	180	XX
11#	44	43	16.5	190	XX
12#	45	43	17.5	200	XX

*Asterisked specifications are for the cemented stem. Cement mantle thickness is approximately 0.75 mm (Single Side).

PBG Cementless Hip Stem System



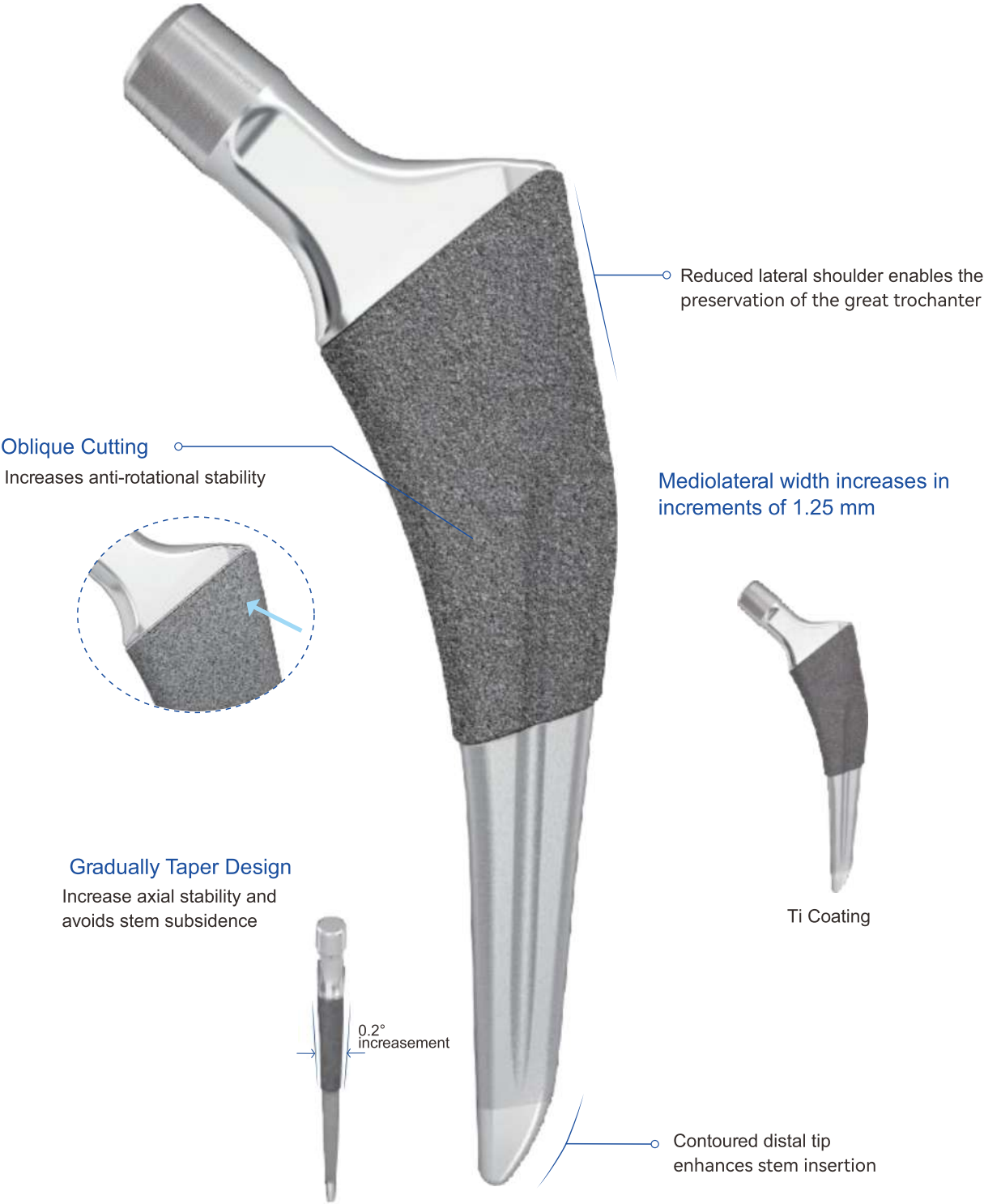
■ Specification



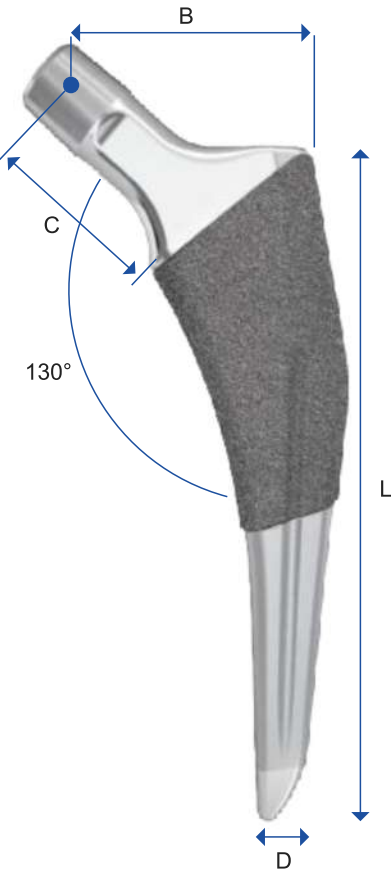
(Unit: mm)

Specification	Offset (B)	Neck Length (C)	Distal Dia. (D)	Stem Length (L)
1#	37	31	7	140
2#	38	31	8	146
3#	38	31	9	151
4#	40	33	11	156
5#	41	33	11	161
6#	43	35	12	166
7#	44	35	13	171
8#	45	37	14	176

Alter Cementless Hip Stem



■ Specification



(Unit: mm)

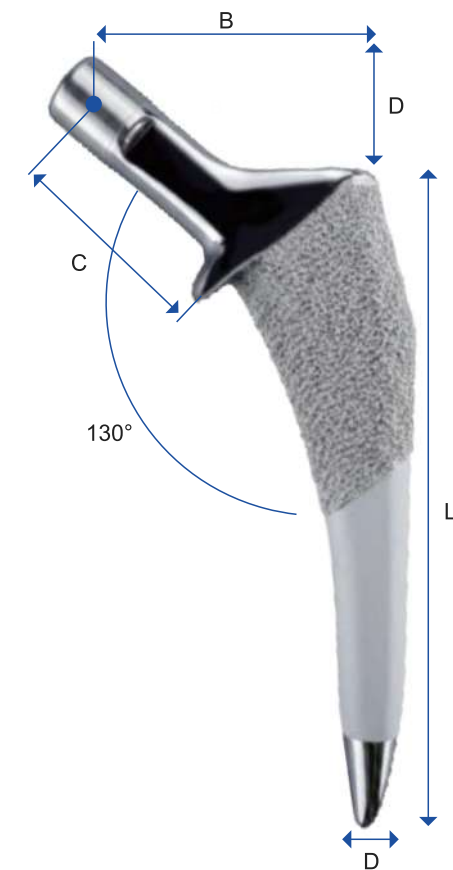
Specification	Offset (B)	Neck Length (C)	Distal Dia. (D)	Stem Length (L)
1#	36	30	8	116
2#	36	30	9	118
3#	38	32	10	120
4#	38	32	12	122
5#	40	33	13	124
6#	40	33	14	126
7#	42	35	16	128
8#	42	35	17	130
9#	44	37	18	132
10#	44	37	20	134

Viaxis Cementless Femoral Stem System

Thanks to proven implant stability and a unique patented design. The Viaxis Hip System has certain features, such as a triple-tapered stem geometry and a medial collar option, that have been shown to improve primary stability of the stem that works with a broad range of patient anatomies.



■ Specification

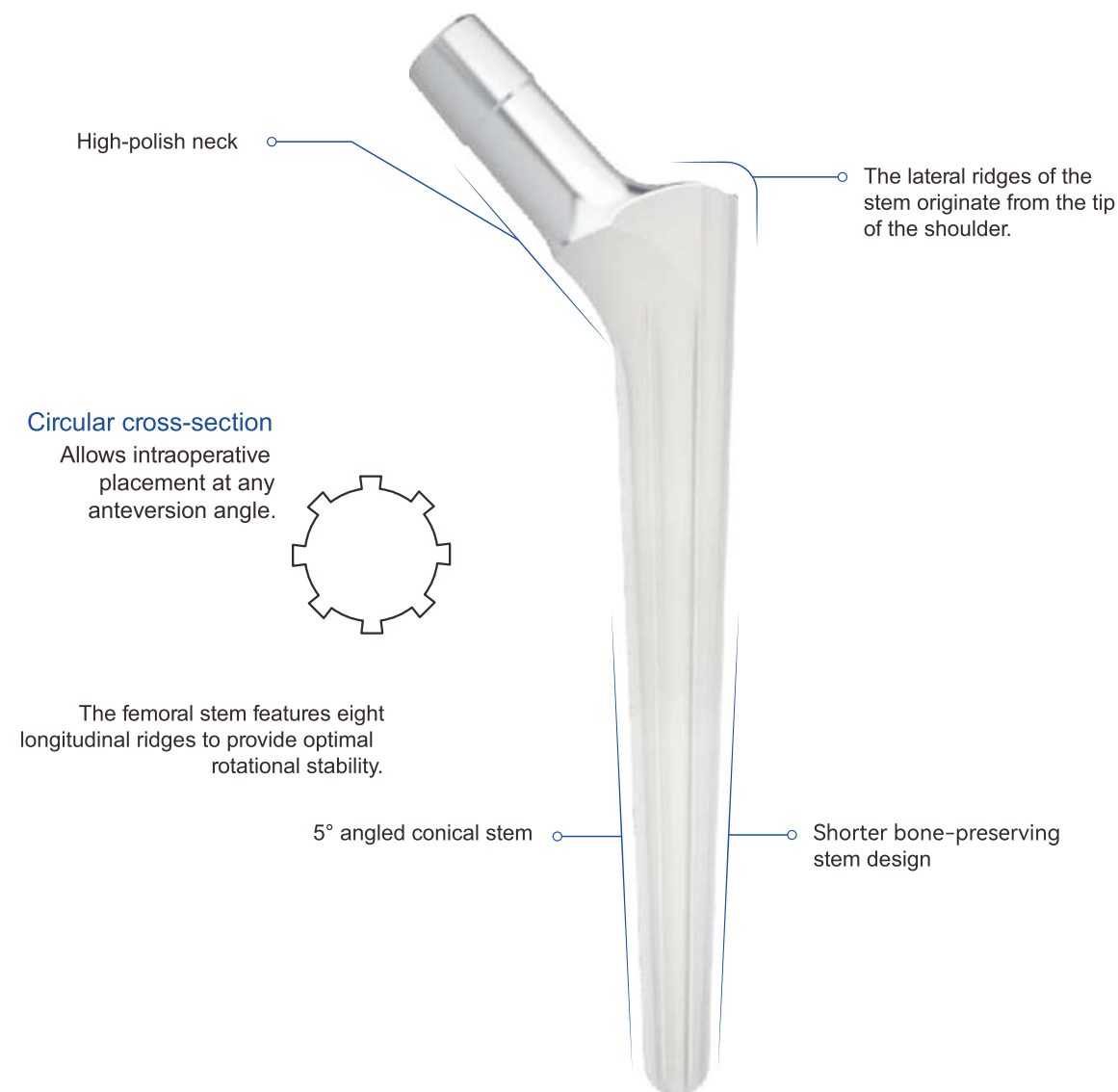


(Unit: mm)

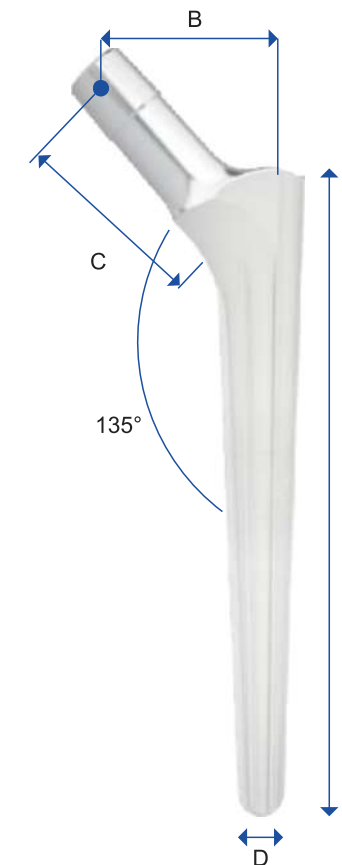
Size	Stem Length(L)	Offset(B)		Neck Length(C)		Leg Length(D)	
	Offset	STD	HO	STD	HO	STD	HO
1#	97	36	42	30	34	27	27
2#	99	38	44	32	36	28	28
3#	101	38	44	32	36	29	29
4#	103	40	48	33	39	30	30
5#	105	40	48	33	39	31	31
6#	107	42	50	35	40	32	32
7#	109	42	50	35	40	33	33
8#	111	44	52	37	43	34	34
9#	113	44	52	37	43	35	35
10#	115	46	54	39	44	36	36
11#	117	46	54	39	44	36	36
12#	119	46	54	39	44	36	36

DDH Cementless Stem

The Cone Stem is a cementless, conical, diaphyseal-engaging femoral stem specifically designed for total hip arthroplasty (THA) in patients with DDH . This patient population often presents with a narrow, deformed femoral canal and poor bone quality, making the use of standard implants technically challenging .



■ Specification

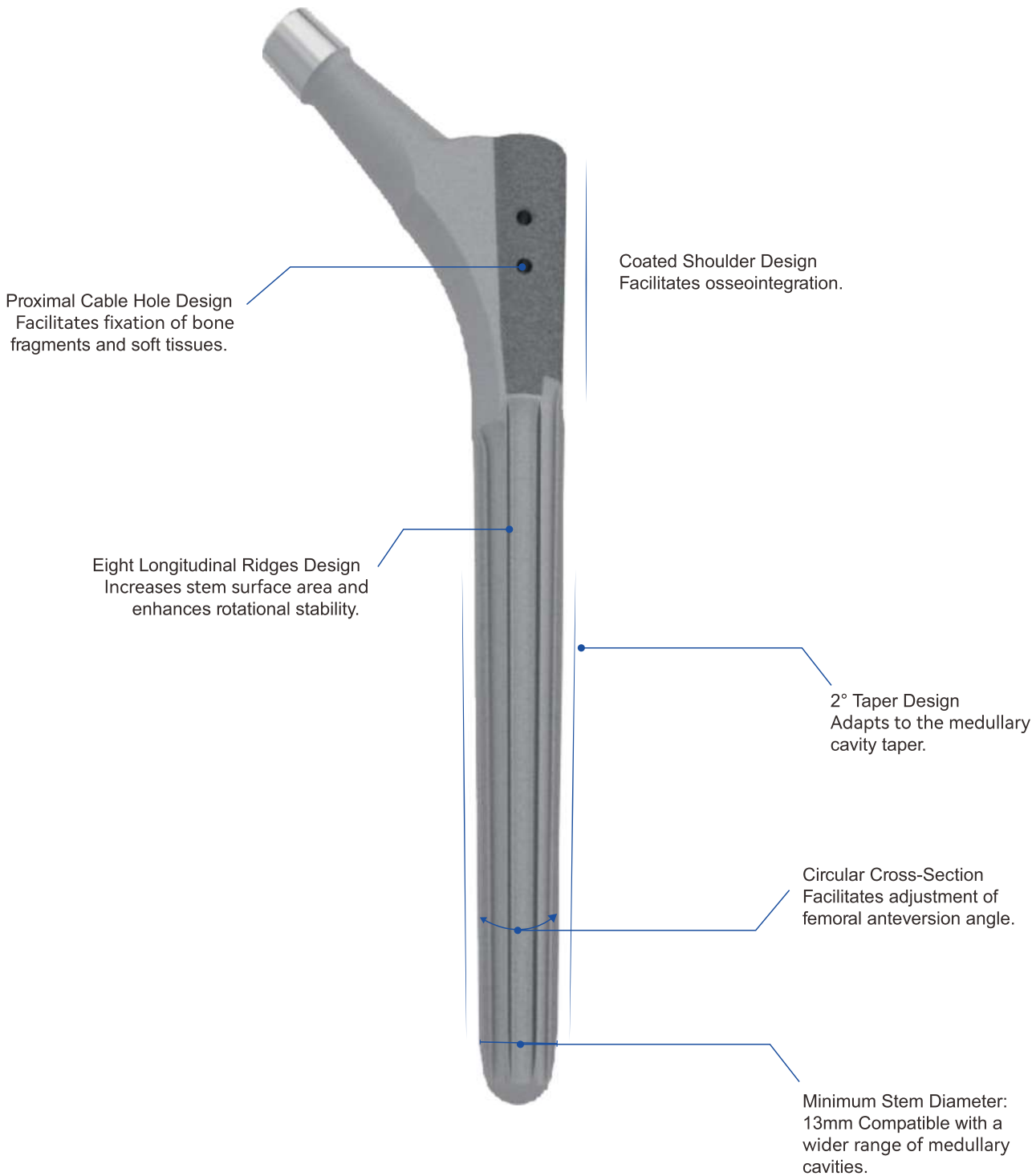


(Unit: mm)

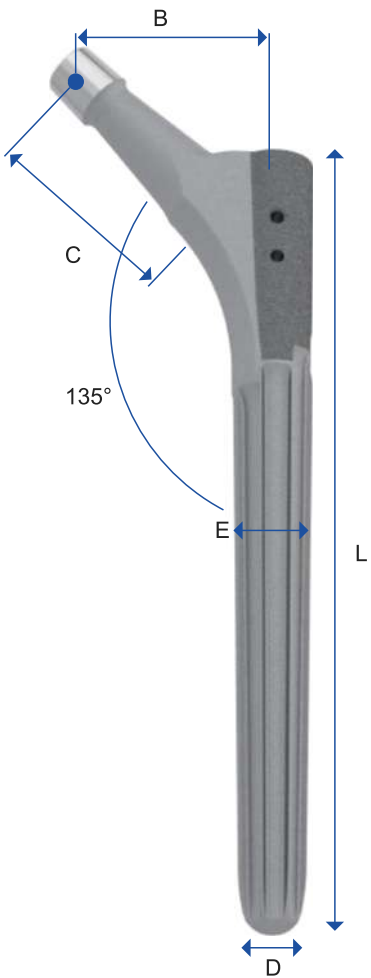
Specification	Offset (B)	Neck Length (C)	Proximal Dia. (A)	Distal Dia. (D)	Stem Length (L)
1#	26	37	13	6	115
2#	30	42	14	7	126
3#	30	43	15	8	126
4#	31	44	16	9	126
5#	32	45	17	10	126
6#	33	46	18	11	126
7#	33	47	19	12	127
8#	34	48	20	13	127
9#	35	49	21	14	127
10#	35	50	22	15	127
11#	36	51	23	16	127
12#	37	52	24	17	128

Anty F Revision Hip Stem

The conical stem design achieves primary stability through continuous cortical press-fit within the diaphyseal femur—a fixation principle particularly advantageous in cases with substantial proximal femoral bone loss. Clinical studies indicate that conical revision stems exhibit reduced relative micromotion compared to cylindrical designs when extensive bone defects are present . The Revision Stem is indicated for revision arthroplasty procedures where distal fixation is required to bypass compromised proximal bone stock.



■ Specification



(Unit: mm)

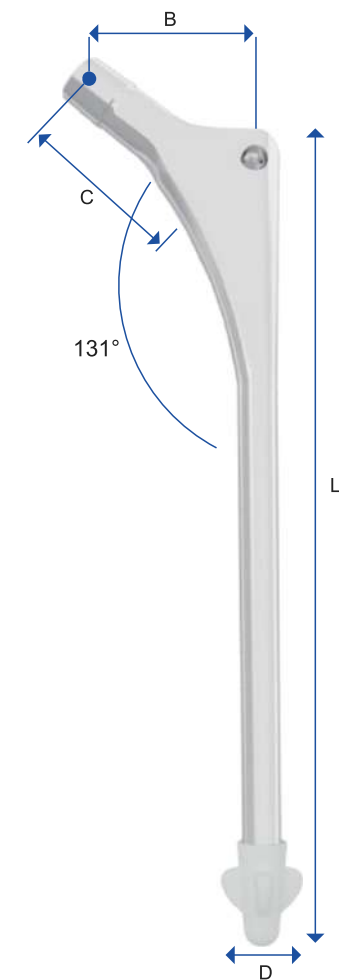
Specification	Offset (B)	Neck Length (C)	Dia. (E)	Distal Dia. (D)	Stem Length (L)
1#	42	39	14	9	170/205/245/285
2#	42	39	15	10	170/205/245/285
3#	42	39	16	11	170/205/245/285
4#	42	39	17	12	170/205/245/285
5#	42	39	18	13	170/205/245/285
6#	42	39	19	14	170/205/245/285
7#	44	39	20	15	170/205/245/285
8#	44	39	21	16	170/205/245/285
9#	44	39	22	17	245/285
10#	46	39	23	18	245/285
11#	46	39	24	19	245/285
12#	46	39	25	20	245/285

PBG Revision Cemented Hip Stem

The revision cemented long stem femoral component is a specialized implant designed for complex revision total hip arthroplasty (THA) procedures where extensive femoral bone loss, periprosthetic fractures, or failed primary implants necessitate extended diaphyseal fixation. These stems, typically exceeding 180mm in length, provide mechanical stability by engaging the distal femoral cortex beyond compromised proximal bone stock. Both cemented and cementless PBG stem using the same broach.



■ Specification



(Unit: mm)

Specification	Offset (B)	Neck Length (C)	Distal Dia. (D)	Stem Length (L)	Centralizer	Restrictor
18#	37	31	7	180	1#	11
19#	38	31	8	190	1#	11
20#	38	31	9	200	2#	13.5
21#	40	33	10	210	2#	13.5
22#	41	33	11	220	3#	16
23#	43	35	12	230	3#	16



Advanced Coating

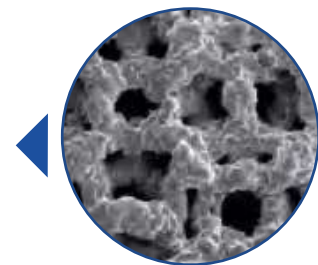
Four advanced surface technologies. One shared mission: stronger fixation, faster healing, better outcomes. Whether it's vacuum plasma or 3D printing, with or without HA – we've engineered the perfect surface for every surgical demand. This 3D-printed cup features 50–80% porosity, 300–800 μm pores, and a fully interconnected porous structure.



Reamers and cup trials are true to size. However, cup implants with a 0.5 mm single-side coating are, on average, 1 mm larger than the labeled diameter. For example, using a 51 mm reamer with a 52 mm trial and a 52 mm implant achieves a 2 mm press-fit.

Apollo Acetabular Cup System

180 degree of the coating, maximizes bone contact.



- Porous fixation ensures initial stability;
- Micro-porous coating provides a bioactive interface for bone ingrowth;



Ti Coating



Ti+HA Coating



3D Printed+HA Coating

3D printed acetabular cups feature a highly porous, bone-like surface that promotes biological fixation (osseointegration), combined with a smooth dense inner layer for durability.

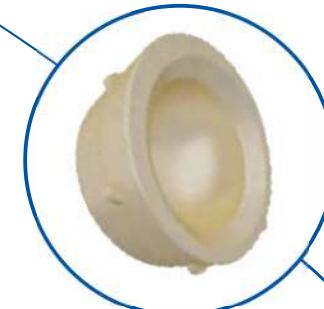


Morse taper locking offers versatile liner options for a single cup.

Full dome matching reduces polyethylene wear.

Vacuum plasma titanium coating facilitates bone ingrowth.

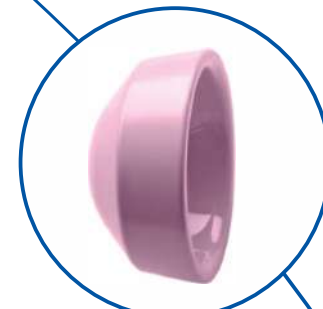
prevent rotation of the polyethylene liner.
Twelve Anti-rotation Devices



VE Liner



Apollo Acetabular Liner,10 Degree



Ceramic Liner



Apollo Acetabular Liner,15 Degree



HXLPE Liner



Apollo Acetabular Liner,0 Degree



PE Liner

Anty A Revision Acetabular Cup

This Revision Acetabular Cup is a specialized implant for complex hip revision surgeries, designed to address severe bone loss and failed primary implants.

- Optimized Biological Fixation: Features a highly porous surface that promotes rapid bone ingrowth and ensures long-term stability.
- Modular Design: Offers versatile options including augments and screw holes to accommodate various defect types and restore the anatomical center of rotation.
- Enhanced Initial Stability: Equipped with multi-axial locking screws for secure fixation, even in compromised bone stock.



■ Specification



(Unit: mm)

Screw	Cup	HXLPE/VE/Ceramic Liner	UHMWPE Liner
		Liner-Head	
Φ6.5× 16-68mm (2mm increments)	44	44/28	
	46	46/28	
	48	48/32	
	50	50/32	
	52	52/36	52/32
	54	54/36	54/32
	56	56/36	56/32
	58	58/36	58/32
	60	60/36	60/32
	62	62/36	62/32
	64	64/36*	64/32
	66	66/36*	66/32
	68	68/36*	68/32
	70	70/36*	70/32
	72	72/36*	72/32

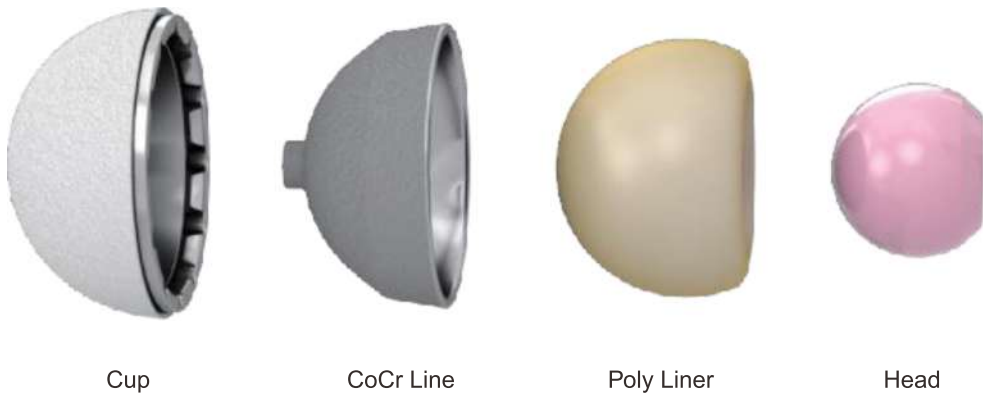
*Asterisked specifications are for HXLPE & HXLPE-VE liners only. Φ6.5mm screws are specifically for cup only.

Dual Mobility Cup System (DMC)

Dual mobility technology is a well-validated, highly effective solution for reducing dislocation risk in hip arthroplasty. When appropriately selected based on patient risk profiles and implant design characteristics, it offers excellent stability, improved functional outcomes, and promising long-term survivorship. As the technology evolves, its role is likely to expand beyond high-risk patients toward broader primary arthroplasty applications.



■ Specification



(Unit: mm)

Screw	Cup	DMC Liner - CoCrMo	HXLPE/VE Poly Head-Femoral
Φ6.5×16-68 (2mm increments)	44	A 32	32/22
	46	B 34	34/22
	48	C 36	36/24
	50	D 38	38/24
	52	E 40	40/28
	54	F 42	42/28
	56	FF 44	44/28
	58	G 44	44/28
	60	GG 46	46/28
	62	H 48	48/28
	64	HH 50	50/28
	66	I 52	52/28

*Φ6.5mm screws are specifically for cup only.

Reduce dislocation risk

Large-diameter femoral heads effectively reduce the incidence of dislocation.

Increased Range of Motion

Provides a maximum range of motion up to 145°.

The acetabular cup features a titanium spray coating.

The coating provides excellent pore size and porosity, facilitating bone ingrowth.

Versatile Bearings Options.

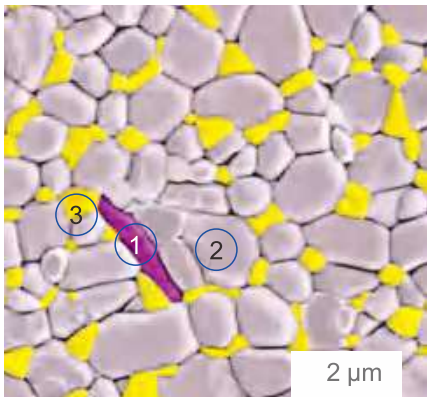
Offers HXLPE and HXLPE VE poly Liner Options.

Low wear performance

Exhibits extremely low wear compared to other types of acetabular prostheses.

BIOLOX Delta Ceramic System

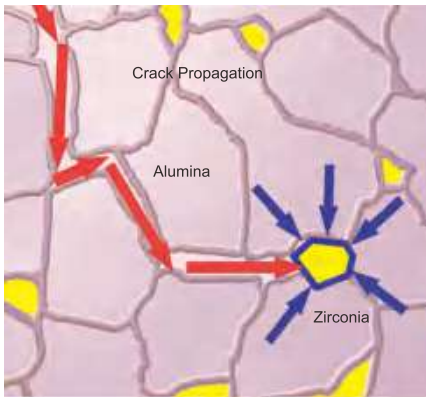
- BIOLOX Delta 4th-Generation Ceramic: Significantly reduces fracture risk and enhances wear resistance. Linear wear rate as low as 0.005 mm/year, with wear resistance 50-200 times higher than traditional materials.
- 40mm Large-Diameter Ceramic-on-Ceramic Products: Provides increased range of motion and reduced dislocation risk.
- Excellent Biocompatibility: Ceramics markedly reduce the incidence of osteolysis and improve prosthesis survivorship.



Source: CeramTec GmbH

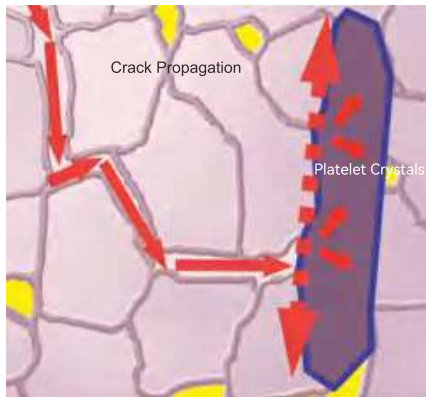
Microstructure of BIOLOX® delta:

- ① Platelet crystals with crack propagation inhibition functionality;
- ② Alumina particles;
- ③ Zirconia particles.



Source: CeramTec GmbH

Principle of Transformation Toughening: Zirconia particles generate a microcrack shielding effect, absorbing external stress (left).

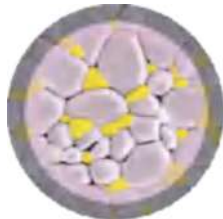


Source: CeramTec GmbH

Principle of Platelet Crystal Reinforcement: Platelet crystals inhibit crack propagation and enhance toughening effects (right).

Microcrack Shielding Effect

The first strengthening mechanism arises from the tetragonal zirconia particles dispersed within the microstructure. These particles are uniformly distributed in the stable alumina matrix, generating localized stress in regions where cracks occur, thereby inhibiting crack propagation.



Exceptionally high wear and scratch resistance



Excellent biocompatibility



High chemical stability

Crack Inhibition Function

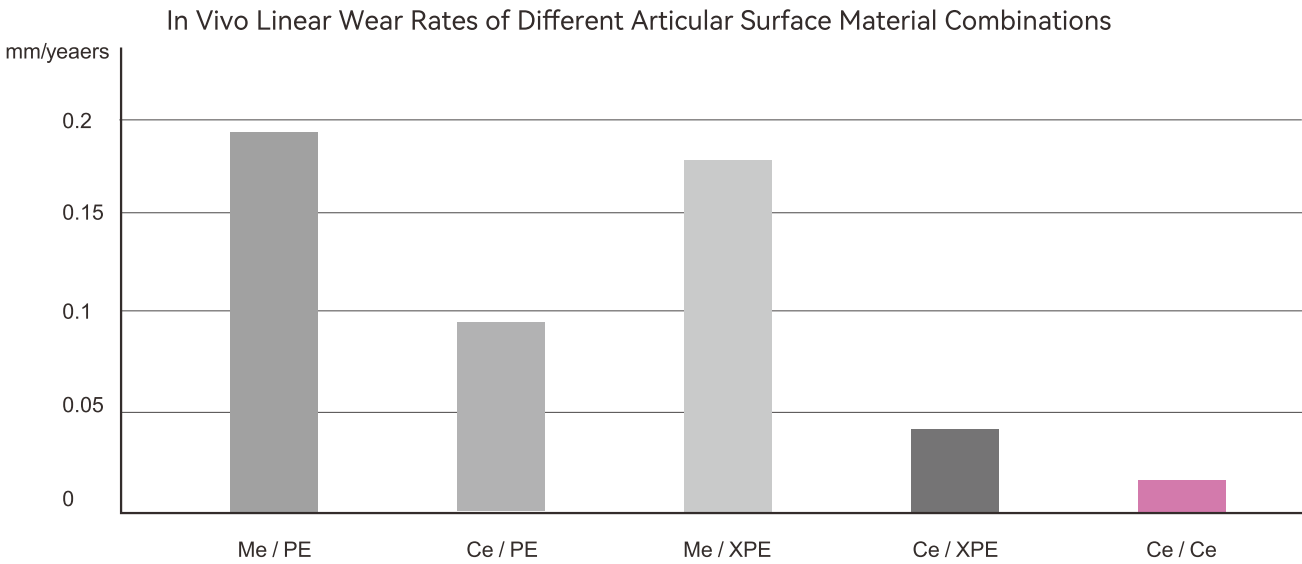
The second strengthening mechanism is achieved through platelet crystals distributed within the matrix. These platelet crystals effectively disperse and absorb crack energy, reducing crack initiation and propagation. Leveraging these strengthening mechanisms, BIOLOX® delta enables prosthesis designers to create complex geometric shapes previously unattainable with traditional ceramic materials.



Reconstruction Sleeve Design



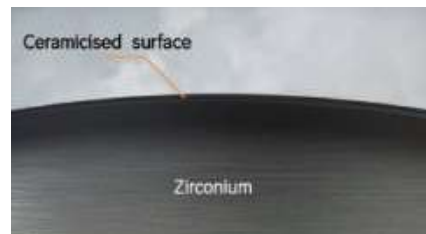
Unique Tribological Performance



Xaga ZrNb Femoral Head

Characteristics of Zirconium-Niobium Femoral Head Products

- Zirconium-niobium alloy exhibits excellent biocompatibility, low density, highstrength, and corrosion resistance, making it widely applicable in the nuclear industry.
- Double Medical leverages the principle of in situ self-generated ZrO₂ on zirconium-niobium alloy. Through heat treatment processes, a high-hardness, corrosion-resistant, and wear-resistant oxide layer is formed on the surface of the femoral head.



In Situ Oxidation Process of Zirconium-Niobium Femoral Head

At elevated temperatures, oxygen diffuses to the surface of the zirconium-niobium femoral head and undergoes a chemical reaction to form a ZrO₂ ceramic layer. This dense ceramic layer effectively blocks fukher inward diffusion of oxygen molecules.

The zirconium-niobium alloy internally captures oxygen atoms to form a diffusion zone (oxygen-rich layer). The original sites of these oxygen atoms become vacancies, the diameter of which coincides with the wavelength of visible light. When light passes through the transparent ZrO₂ ceramic layer and enters these vacancies, interference and absorption occur, resulting in the characteristic black appearance of the zirconium-niobium femoral head.

High Hardness

A ceramic oxide layer formed through heat treatment exhibits extreme hardness. Under fatigue loading equivalent to three times body weight, it withstands 10 million cycles of testing while maintaining a compressive resistance exceeding 90 kN. Compression tests confirm no risk of fracture.

Excellent Biocompatibility

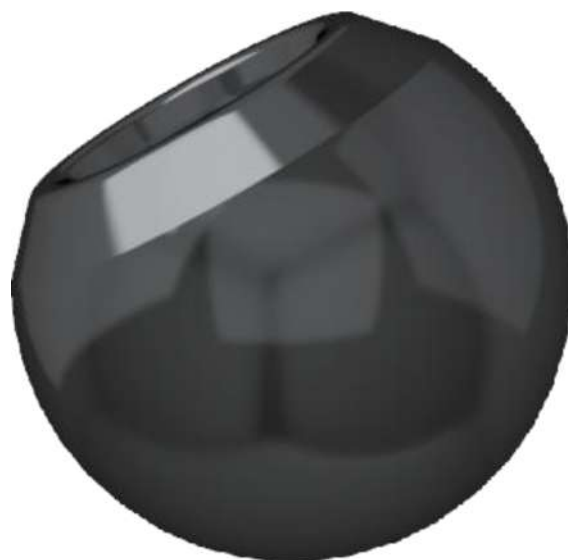
Zirconium (Zr) and niobium (Nb) are both "bioaffinity metals." Zirconium-niobium alloy contains no or only trace amounts of elements such as nickel (Ni), thereby avoiding allergic reactions. Moreover, the release of metal ions is significantly below the human safety threshold.

Wear Resistance

The ceramic oxide layer on the zirconium-niobium femoral head effectively inhibits surface roughening and exhibits excellent surface wettability.

Low MRI Artifact

Zr-Nb alloys exhibit lower magnetic susceptibility, resulting in reduced MRI artifacts.



Femoral Head

- High-polished surface minimize the wear between the head and liner.
- Multiple specifications available for convenient adjustment of offset.
- Co-Cr-Mo Material: better strength and wear resistance.
- Four diameters: 24mm/28mm/32mm/36mm.



Specification



CoCrMo Head (Unit: mm)

Size	offset					
22	0	3				
24	-1	0	3.5	7		
28	0	1.5	5	8.5	12	15.5
32	-2	1	5	9	13	
36	-4	0	4	8		

Ceramic Head (Unit: mm)

Size	offset			
28	S	M	L	
32	S	M	L	XL
36	S	M	L	XL
40	S	M	L	XL

*Revision Ceramic Head is provided with metal sleeve

ZrNb Head (Unit: mm)

Size	offset				
22		S	M		
24		S	M	L	
28	XS	S	M	L	
32	XS	S	M	L	XL
36	XS	S	M	L	XL

Acetabular Augment System

■ Specification



Augment-Buttress (Unit: mm)

Size	Configurations		
56	Left	neutral	Right
62			
68			

Augment-Shim	5°	10°	15°
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Augment (Unit: mm)

Size	Thickness			
50/52	10	15	20	30
54/56				
58/60				
62/64				
66/68				
70/72				

Augment Screw (Unit: mm)

Diameter	Lenght						
Φ5.5	32	38	44	52	56	64	68

*Φ5.5mm screws are specifically for augment only.

Reconstruction Cages/Rings

Revision acetabular cages and rings represent a critical class of implants in the orthopedic surgeon's armamentarium for addressing severe acetabular bone loss during total hip arthroplasty (THA) revision. Unlike standard hemispherical cups or modular augments, these devices function as structural "scaffolds" or "internal fixation plates" that bridge massive defects, protect underlying bone grafts, and restore the native hip center of rotation. Their product features are fundamentally oriented toward providing mechanical stability in the absence of biologic fixation, versatility in addressing diverse defect patterns, and durable load distribution until graft incorporation occurs.



■ Specification

(Unit: mm)		(Unit: mm)	
Cage		Ring	
52/48 L		50/46	
52/48 R		52/48	
58/54 L		54/50	
58/54 R		56/52	
64/60 L		58/54	
64/60 R		60/56	
		62/58	
		64/60	

Cemented Cup

Cemented acetabular cups represent a foundational implant category in total hip arthroplasty, distinguished by their reliance on polymethylmethacrylate bone cement for fixation rather than biologic ingrowth. These devices remain a preferred option for specific patient populations and clinical scenarios, including elderly patients with osteoporotic bone, those requiring immediate postoperative mobilization, or cases where cementless fixation is contraindicated . The product features of cemented acetabular cups are organized around three core principles: cement mantle optimization for immediate stability, bearing surface durability, and anatomic design features that enhance joint stability and range of motion.

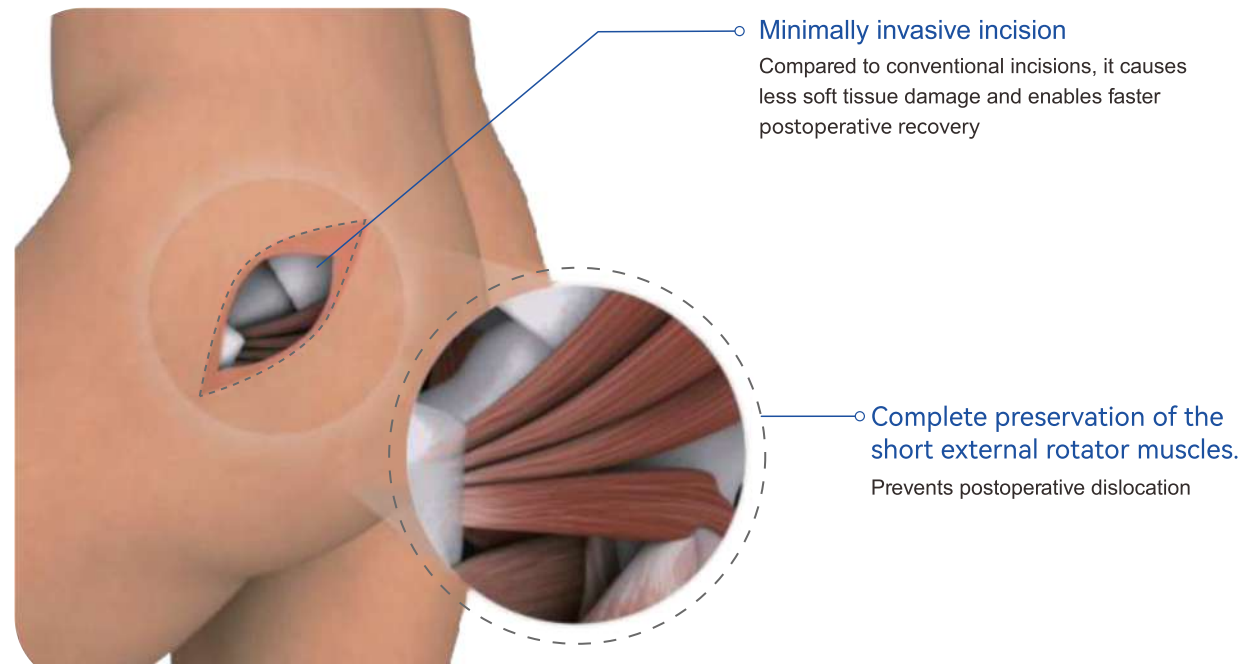


■ Specification

Cemented Cup		(Unit: mm)	
Cup Size	Degree		
43/24	0°/ 10°	42	28
45/24		44	32
47/24		46	
47/28		48	
49/28		50	
51/28		52	
53/28		54	
55/28		56	
57/28		58	
59/28		60	
61/28	62		
		64	0°
		66	
		68	
		70	

Prime Cemented Cup		(Unit: mm)	
Cup Size	Head Size	Degree	
42	28	0°	
44	32		
46			
48			
50			
52			
54			
56			
58			
60			
62			
64			
66			
68			
70			

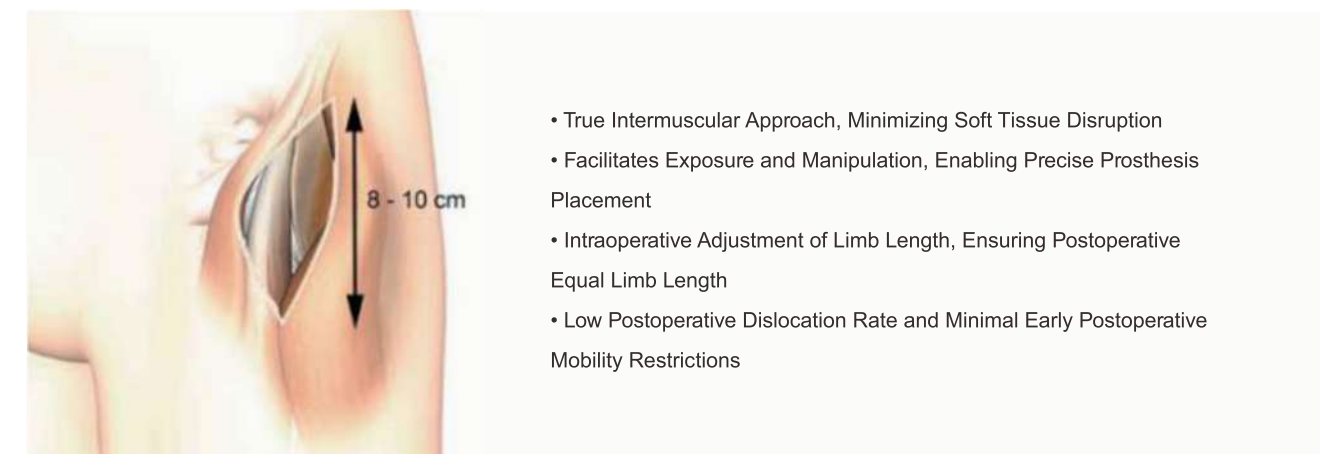
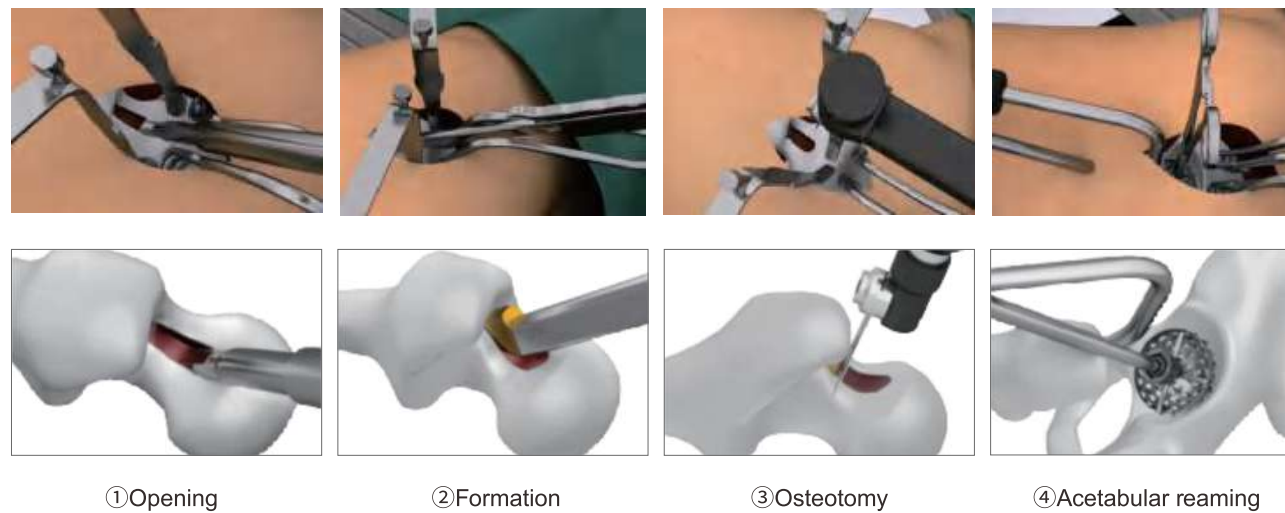
MIS Hip Instrument



DAA-AMIS Hip Instrument

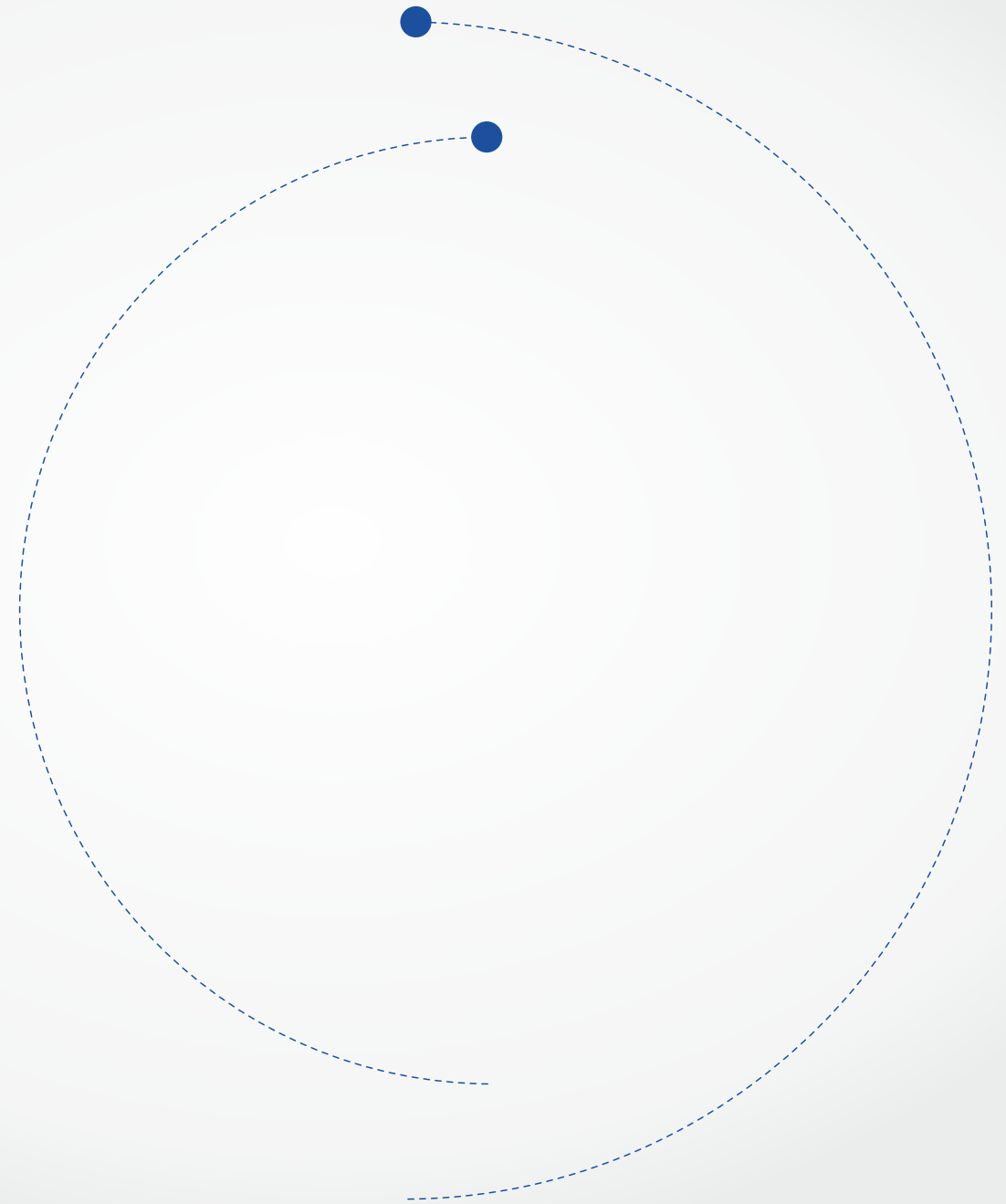


Minimally Invasive Hip Replacement: Selected Procedures



02

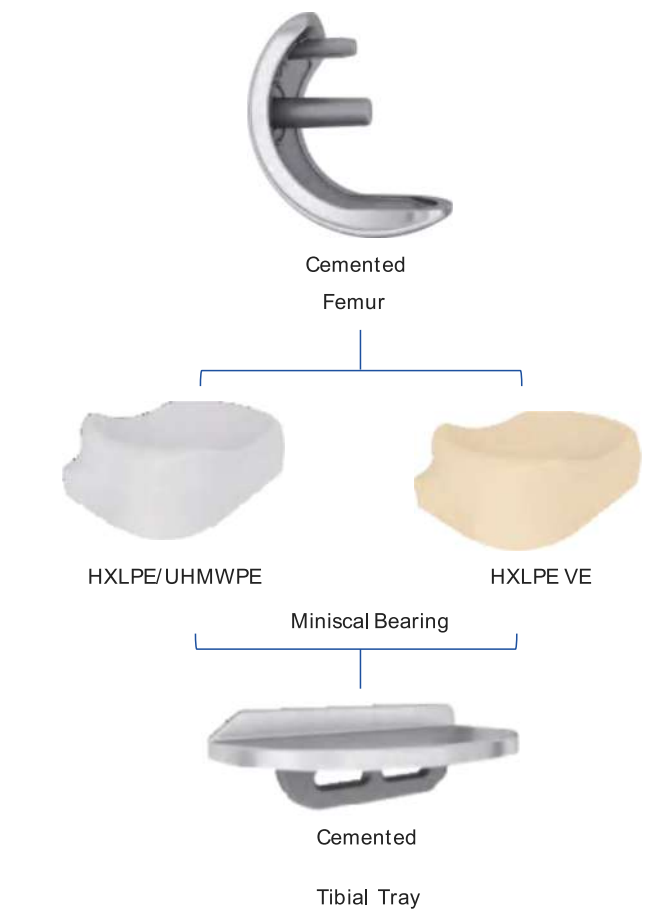
— Knee



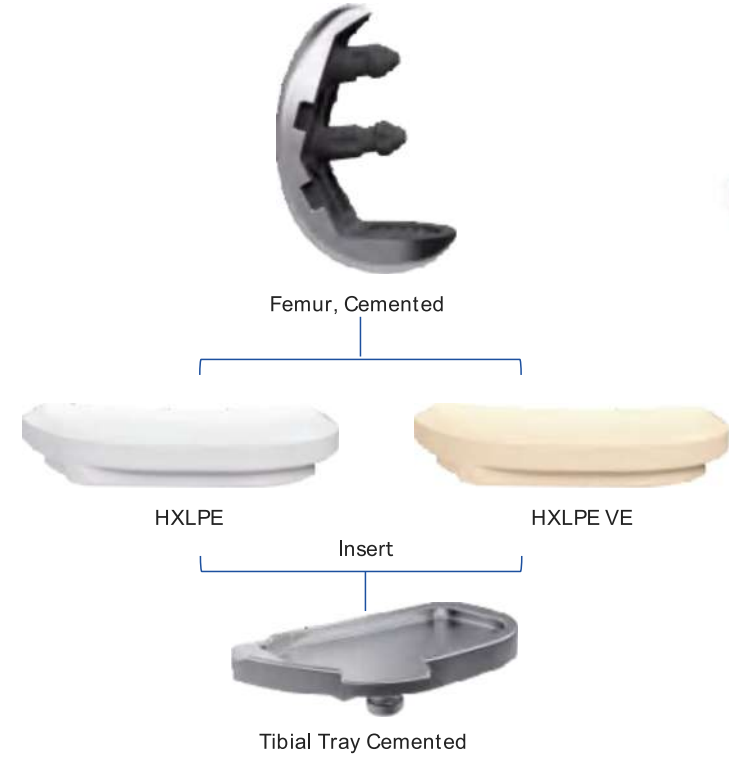
Knee Implant Portfolio



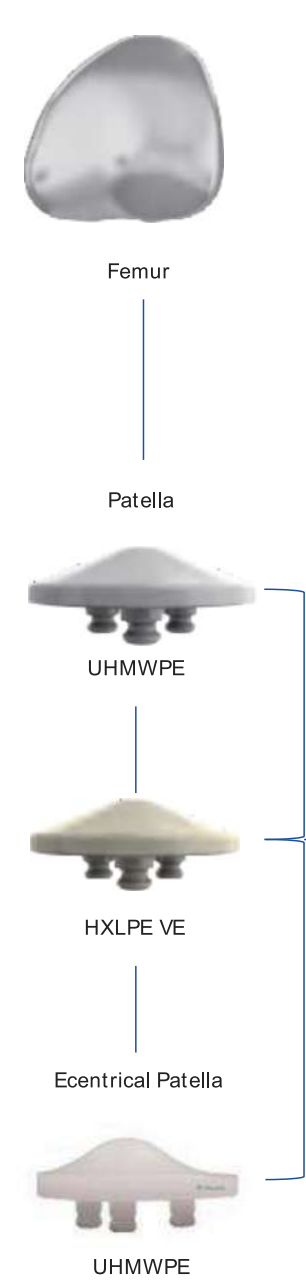
Simple MPK System



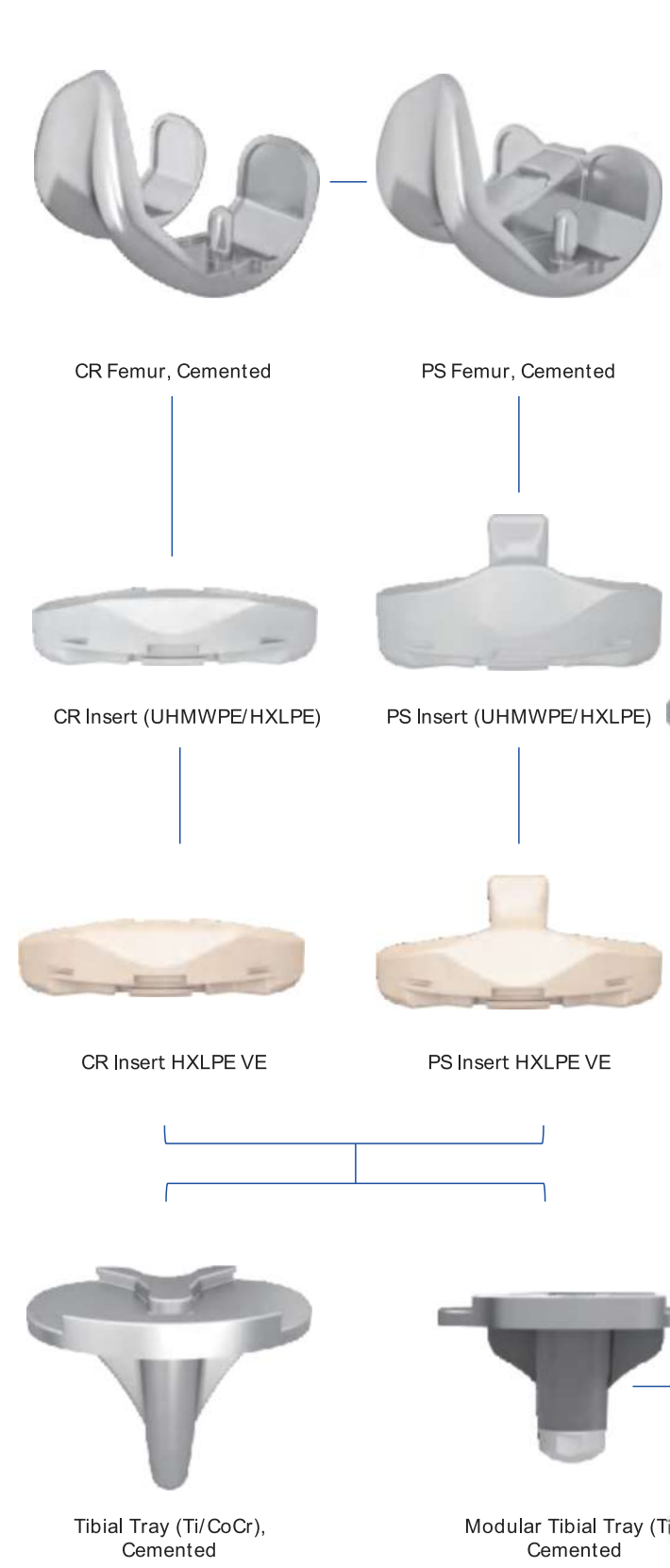
Simple Anatomical FPK System



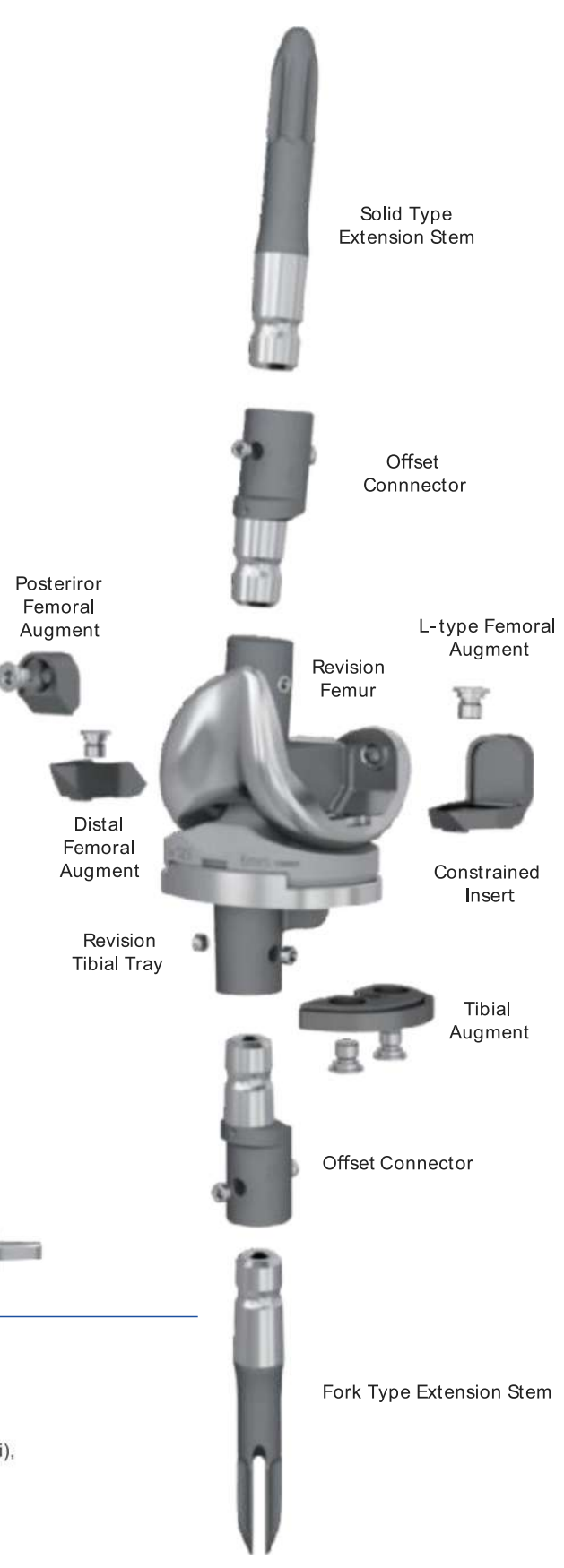
Mei-FOA Patellofemoral Joint System



Cynthia Total Knee System

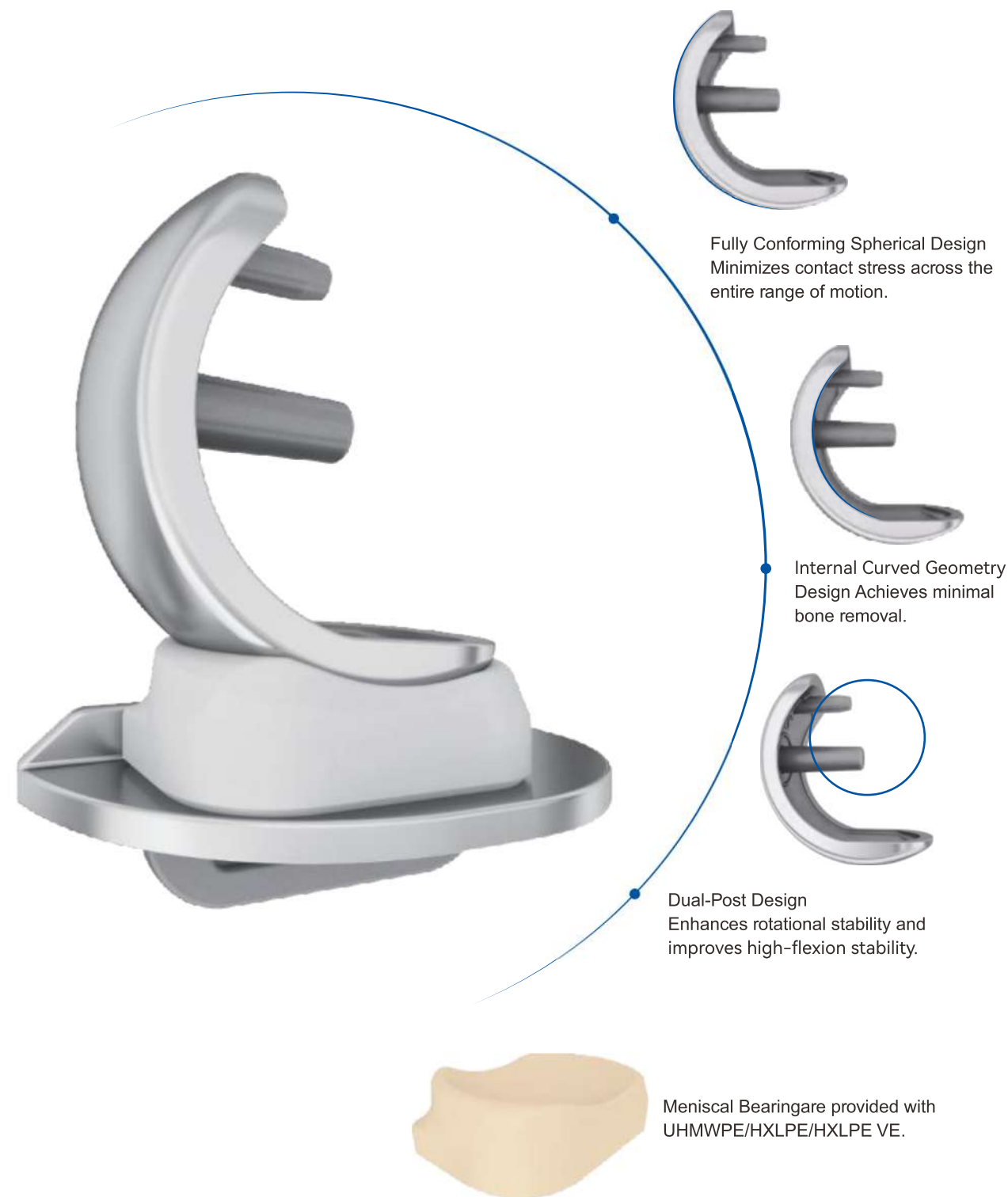


Cynthia Revision Knee System

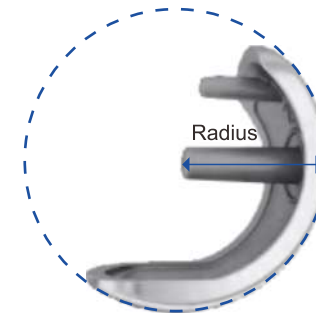


Simple Mobile Bearing Unicondylar System

Mobile bearing UKA represents a well-established, clinically proven option for patients with isolated medial compartment osteoarthritis only. Its benefits over TKA—including faster recovery, greater range of motion, and maintenance of natural knee biomechanics—are validated exclusively for the medial side.

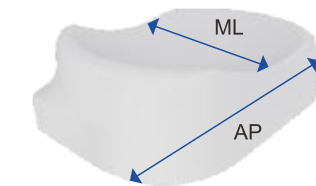


■ Specification



Femoral Component (Unit: mm)

Size	Posterior Thickness	ML	Radius
0#	6	18	20
1#	6	19	22
2#	7	21	24
3#	7	22	26
4#	8	23	28



Meniscal Bearing Component (Unit: mm)

Size	Thickness	ML	AP
0#	3~9	20	29
1#	3~9	22	31
2#	3~9	24	34
3#	3~9	26	36
4#	3~9	28	38

*Sizing of Meniscal Bearings are recommended to follow Femoral Component.



Tibial Component (Unit: mm)

Size	ML	AP
17#	24	46
18#	26	46
19#	26	49
20#	28	52
21#	30	55
22#	32	58
23#	34	60

Simple Anatomical Fixed Bearing Unicondylar System

The anatomical fixed-bearing unicompartmental knee arthroplasty (UKA) system is a next-generation prosthetic design that restores natural joint kinematics by closely matching the patient's native femoral and tibial anatomy. Unlike mobile-bearing designs, the fixed-bearing UKA features a polyethylene insert that is firmly secured to the tibial baseplate, providing a single articulation interface. This design offers excellent primary stability, reduces wear risk associated with moving components, and minimizes bone resection.



Multi-Radius Design
Enables more natural flexion and extension movements.

Curved Concave Surface
The femoral condyle prosthesis features a large surface radius that distributes load evenly across the meniscal insert, while maintaining consistent contact area throughout flexion and extension angles.

Dual-Post Design
Enhances rotational stability and improves high-flexion stability.

Unconstrained Motion
Allows a certain range of varus-valgus angulation.

Anatomical Design
Medially and laterally configured femoral and tibial components deliver an accurate, patient-matched fit.

Multiple Bearing Options
Offer HXLPE & HXLPE VE Insert options.



Specification



Femoral Component (Unit: mm)

Size	ML	AP
1#	18	43
2#	19	45
3#	21	48
4#	22	50
5#	24	54
6#	25	58



Tibial Component (Unit: mm)

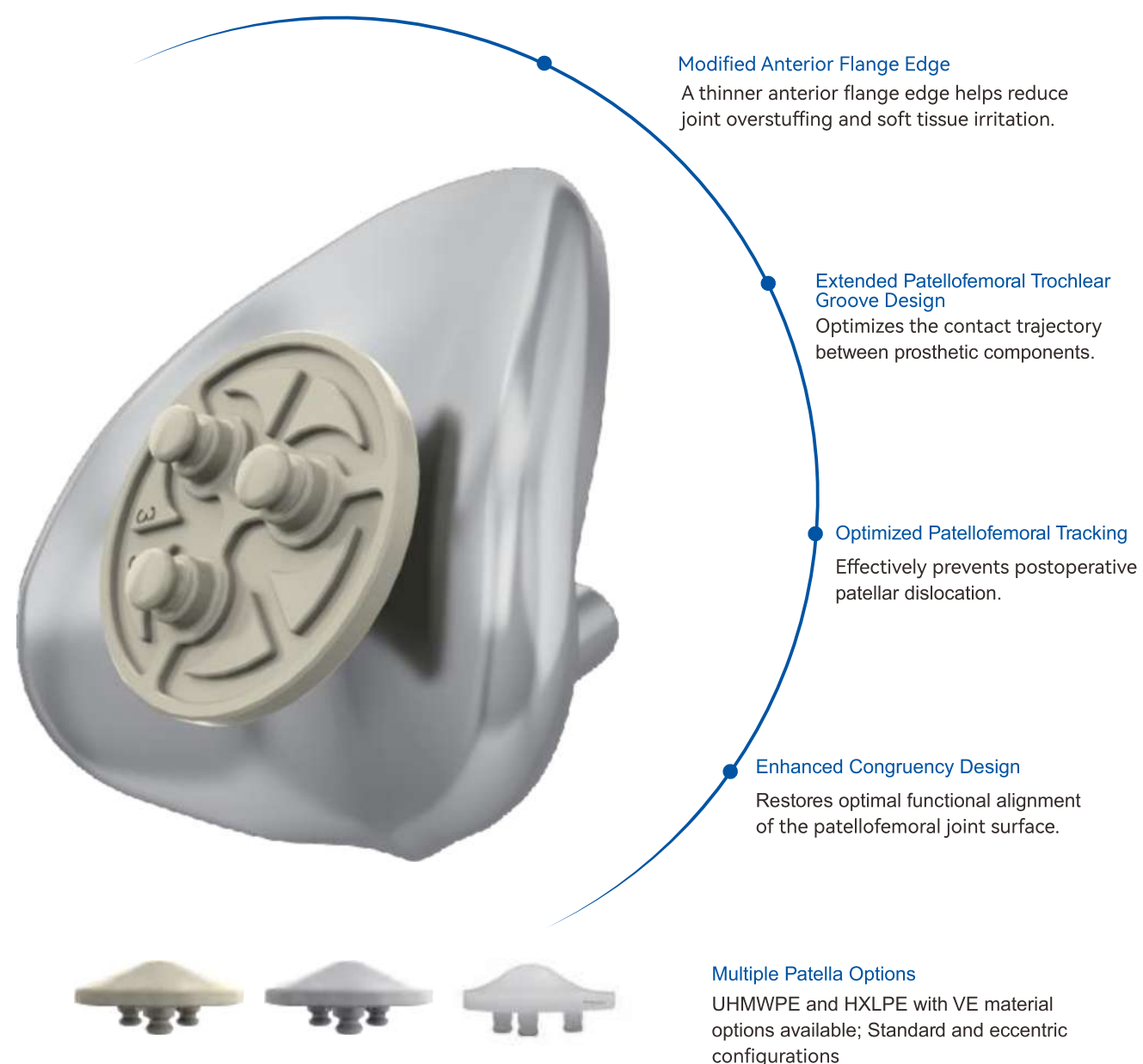
Size	ML	AP	Insert Thickness
1#	23	45	7--11
2#	24	48	
3#	25	50	
4#	26	53	
5#	28	55	
6#	33	56	

Mei-FOA Patellofemoral Joint System

Patellofemoral Arthroplasty (PFA) is a specialized partial knee replacement procedure designed exclusively for the patellofemoral compartment—the articulation between the patella (kneecap) and the femoral trochlea (groove at the front of the femur). Unlike total knee arthroplasty or unicompartmental knee arthroplasty, PFA selectively resurfaces only the diseased patellofemoral joint while preserving the healthy medial and lateral tibiofemoral compartments, as well as both cruciate ligaments.

This procedure is indicated for patients with isolated patellofemoral osteoarthritis or other patellofemoral pathologies who have failed conservative management, and who do not have significant involvement of the medial or lateral compartments.

■ Specification



Femoral Component (Unit: mm)

Size (L/R)	ML
3#	37
4#	39
5#	41
6#	43
7#	45
8#	47
9#	49
10#	51.5
11#	54

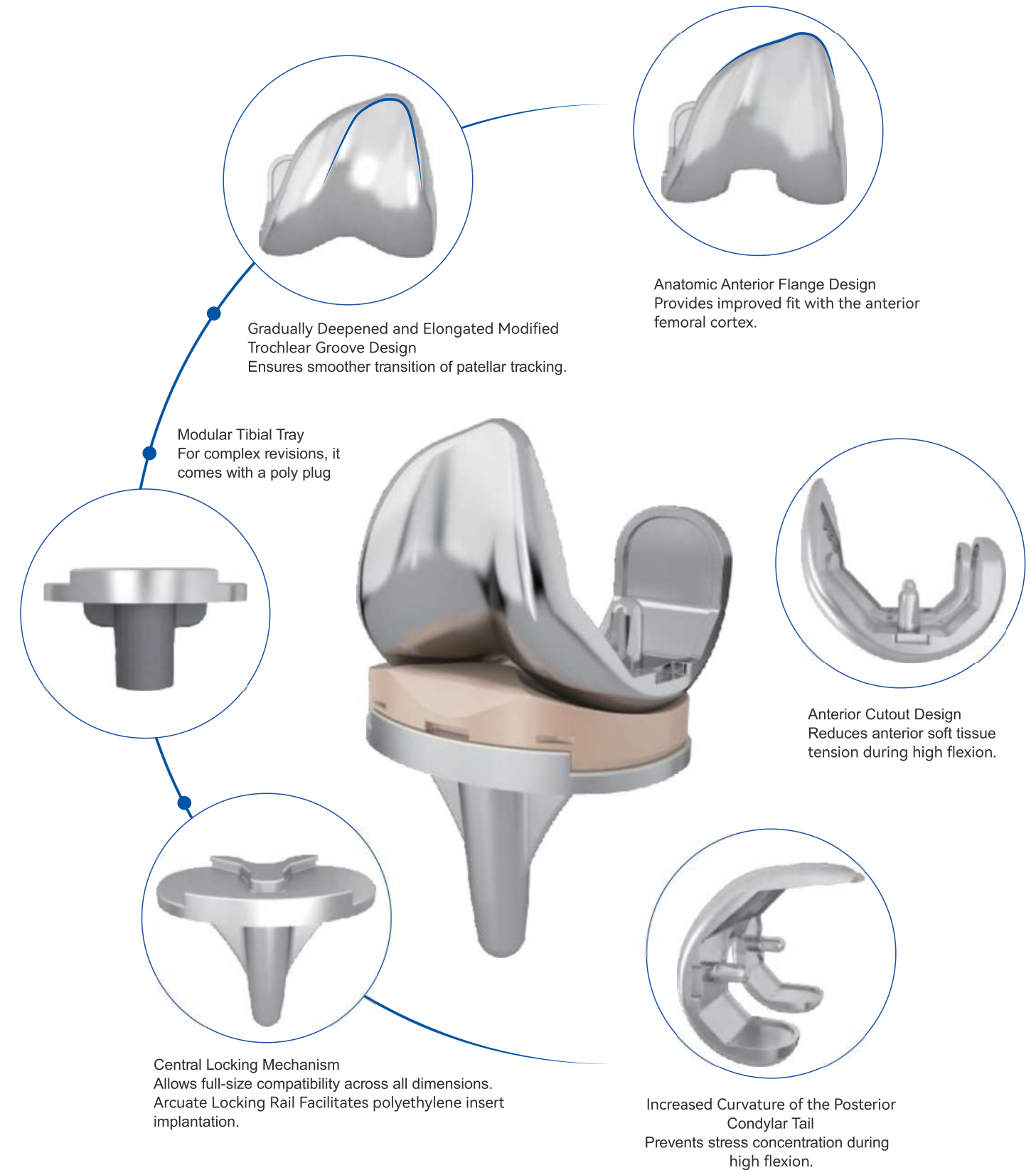
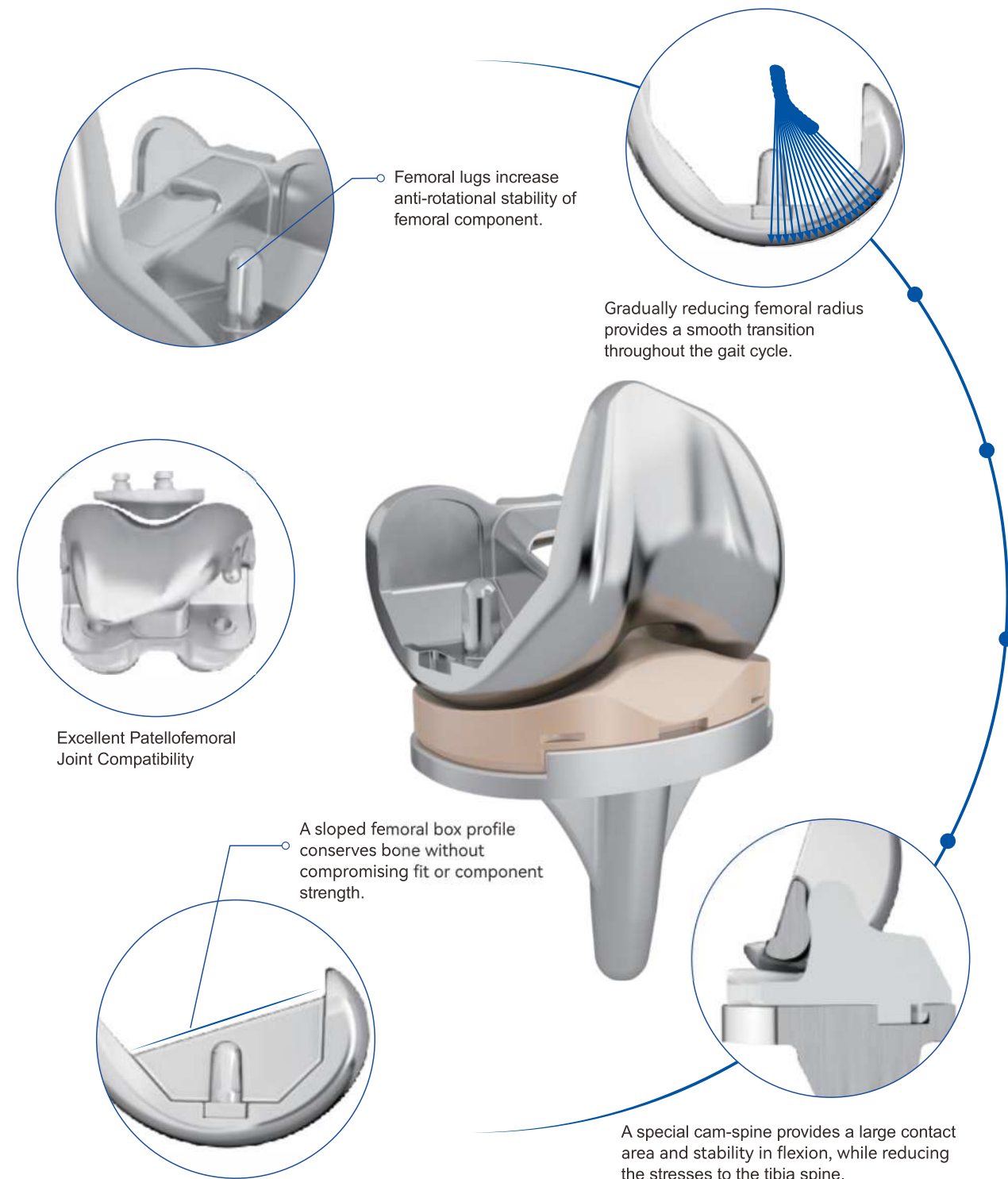


Patella (Unit: mm)

Diameter (D)	Height (H)
26	7.5
29	8
32	8.5
35	9
38	9.5
41	10

Cynthia Total Knee System

All inserts are provided with vitamin E-infused components.



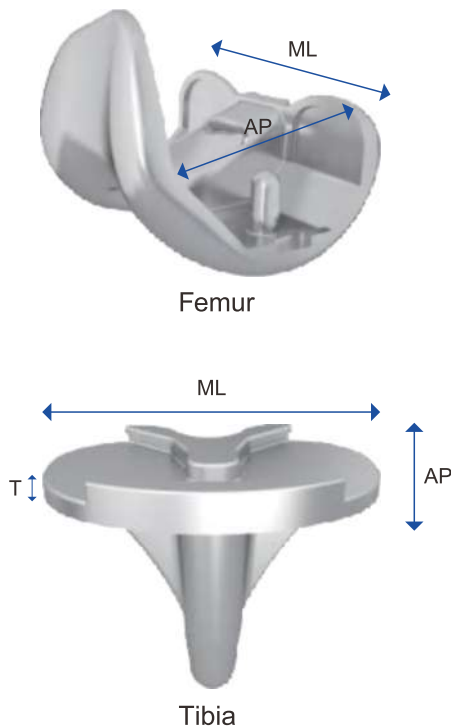
Cynthia Total Knee System

■ Specification

Sizing Chart

Size	Femoral Condyle (L/ R)		Tibial Tray			Insert
	AP	ML	AP	ML	T	T
10#	54	59/62*	41	62	4	6—16
11#	55	60/63*	42	65		
12#	57	63/66*	43	67		
13#	60	65/68*	45	68		
14#	61	67/70*	46	70		
15#	64	68/71*	47	73		
16#	66	71/74*	50	75		
17#	68	72/75*	51	76		
18#	70	75/78*	53	79		
19#	74	79/82*	54	83		
20#	78	82/85*	56	86		

*Femoral condyle and tibial tray in 2mm increments. Inserts in 1mm increments averagely.
 *The posterior condylar offset is 9mm for the PS femur and 8mm for the CR femur.
 *Asterisked specifications apply to the Wider Femur Size, which is 3mm wider than the Standard Femur.



Compatibility Chart

		Femoral Condyle (L/ R)											
		10#	11#	12#	13#	14#	15#	16#	17#	18#	19#	20#	
Tibial Tray	10#												
	11#												
	12#												
	13#												
	14#												
	15#												
	16#												
	17#												
	18#												
	19#												
	20#												

Example: Size 14# Femur

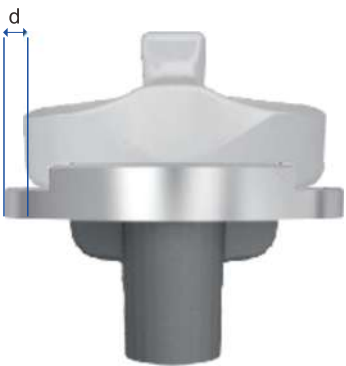


Compatibility Chart



		Primary Femur										
		10#	11#	12#	13#	14#	15#	16#	17#	18#	19#	20#
High Constrained Tibial Insert	3#											
	5#											
	7#											
	9#											
	11#											

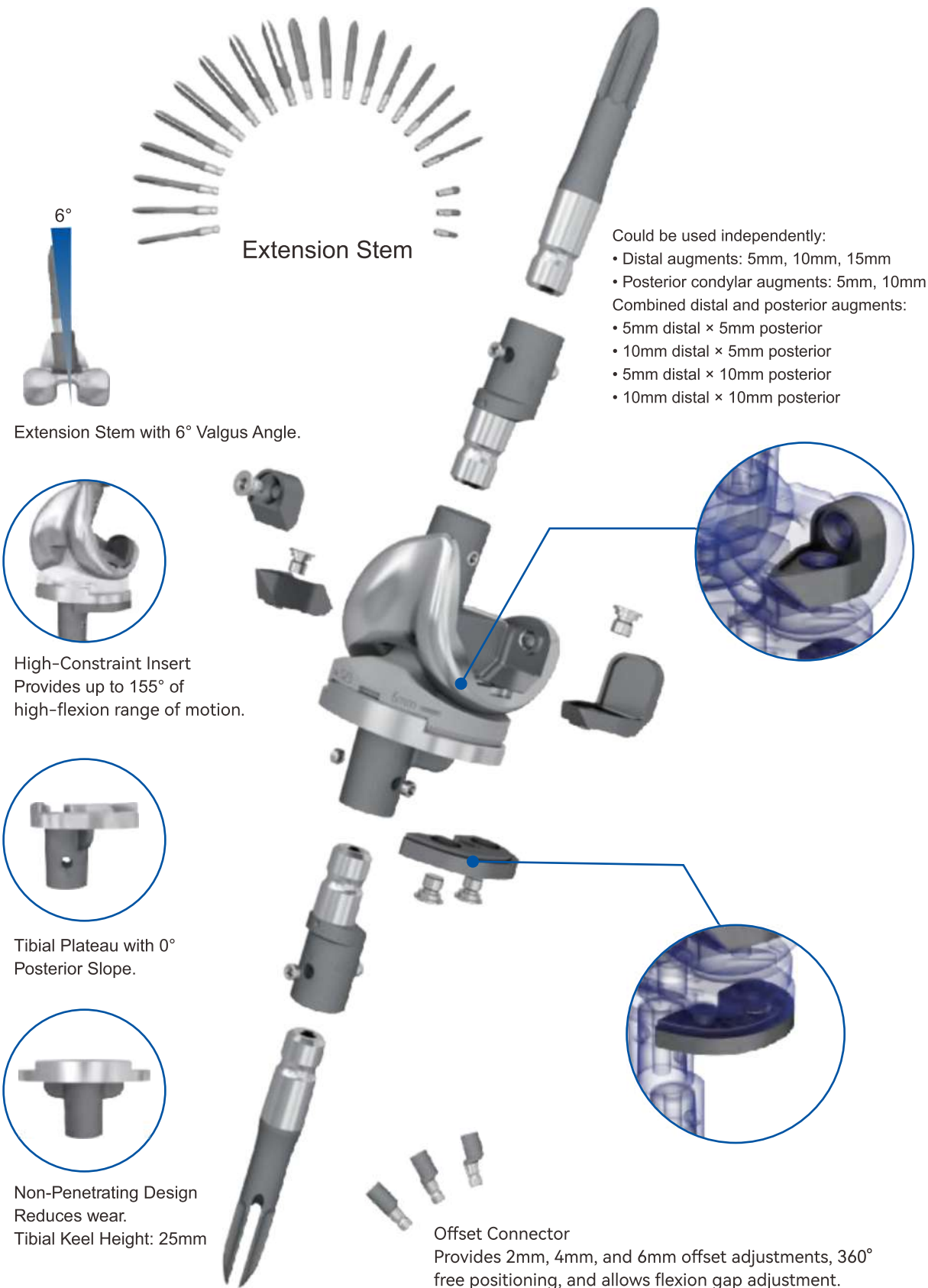
Measure the femoral AP for sizing prior to consulting the revision compatibility table above.



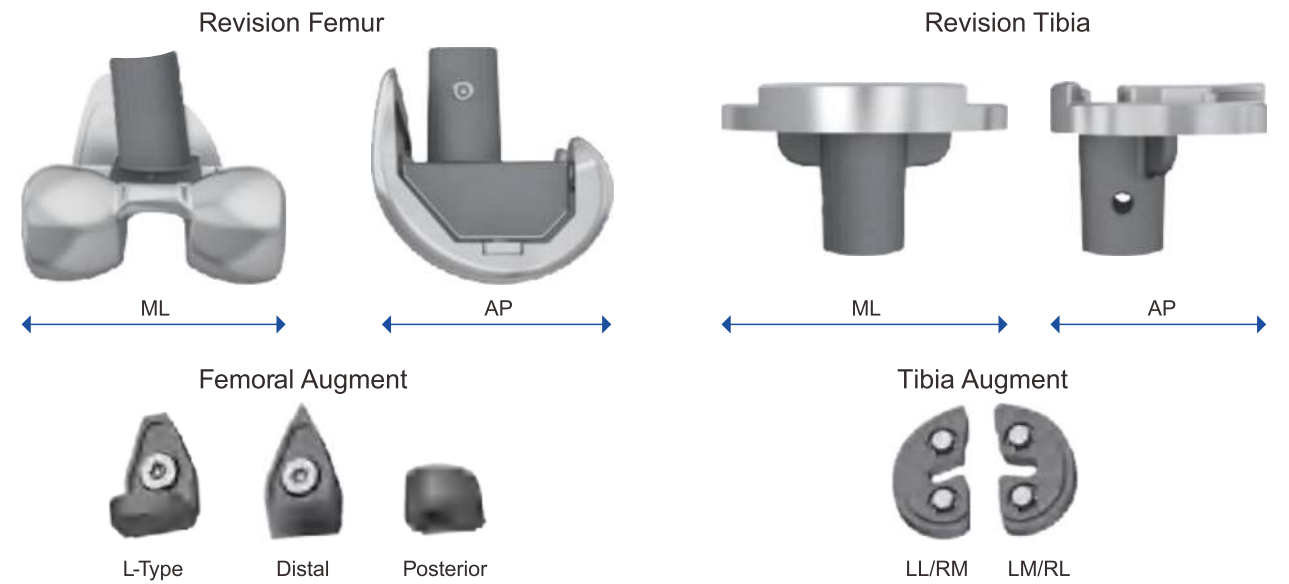
Dark blue area: liner-to-tray matching unilateral distance 'd': < 1.5 mm; light blue area: liner-to-tray matching unilateral distance 'd': 1.75–3 mm, as table below.

		Primary Insert										
		10#	11#	12#	13#	14#	15#	16#	17#	18#	19#	20#
Revision Tibial Tray	3#											
	5#											
	7#											
	9#											
	11#											

Cynthia Revision Knee System



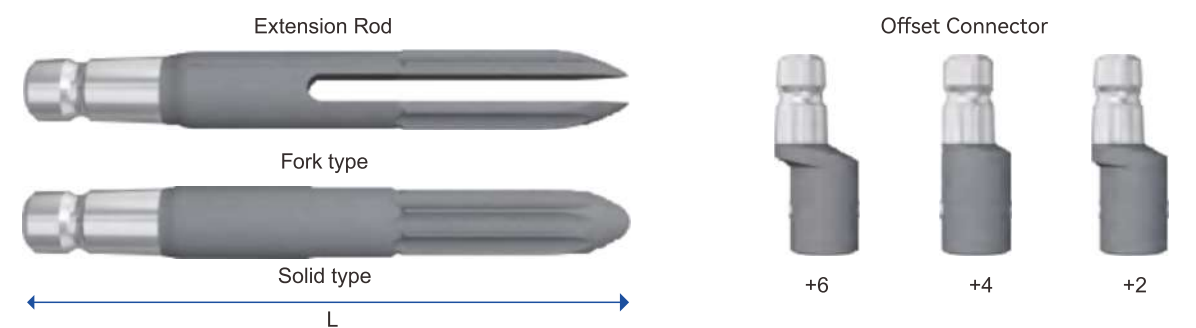
Specification



© Revision System

(Unit: mm)

Size		3	5	7	9	11
Revision Femoral Component	M/L	59	63	67	71	75
	A/P	54	58	62	66	70
Distal Femoral Augment	Thickness	5、 10、 15				
Posterior Femoral Augment	Thickness	5、 10、 15				
L-Type Femoral Augment		5mm × 5mm, 10mm × 5mm, 5mm × 10mm, 10mm × 10mm				
High Constrained Tibial Insert	Thickness	6、 7、 9、 11、 13、 15				
Revision Tibial Tray Fixed Bearing	M/L	64	68	72	76	80
	A/P	42	44	47	50	53
Tibia Augment (LM/RL, LL/RM)	Thickness	5、 10、 15				
Offset Connector	Offset	+2、 +4、 +6				



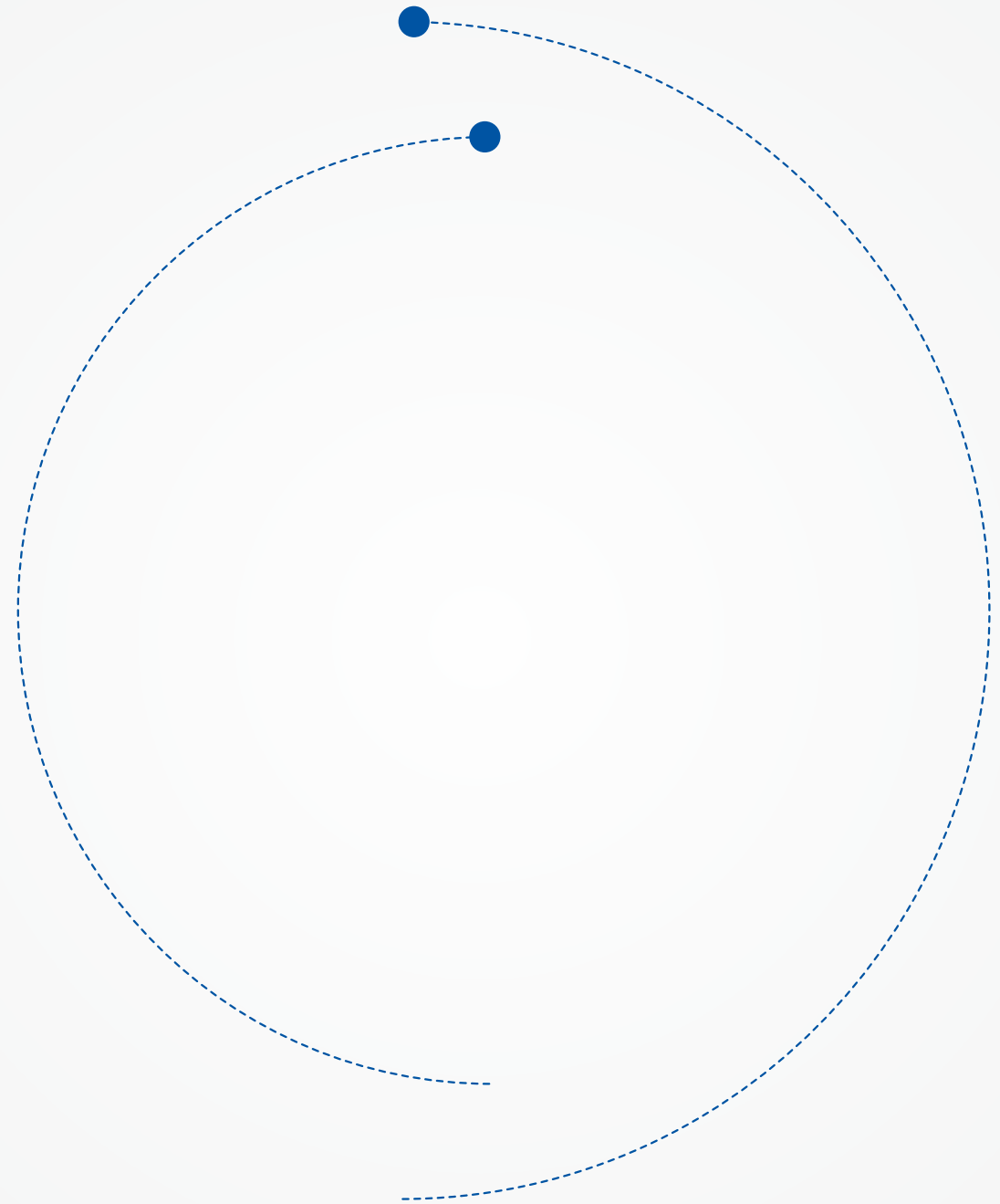
© Revision Extension Rod

(Unit: mm)

		Diameter		9	10	11	12	13	14	15	16	17	18	19	20
Solid type		Length	80		•		•		•						
			120		○		○		○		○		○		○
			160		○		○		○		○		○		○
Fork type			120	•	•	•	•	•	•	•	○		○		
			160	•	•	•	•	•	•	•	○		○		

03

— Shoulder



Shoulder Prostheses System



Features of Fracture-Type Humeral Stem Products

- Asymmetrical Anterolateral Flange Design: Positioned along the fracture line without interfering with bone fragment reduction. Guides accurate reduction of bone fragments and supports greater/lesser tuberosity fixation. Facilitates bone fragment stabilization and directs prosthesis implantation orientation. Determines the prosthetic retroversion angle.
- Asymmetrical Anterolateral Flange with Multi-Suture Windows: Provides effective two-point compression fixation for tuberosity fragments, facilitating accurate bone reduction.

- Inherent Posterior Offset of 1.8mm
- Asymmetrical Lateral Flange with Multiple Suture Fixation Holes
- Proximal Textured Surface



- The stem proximal end is designed to be slender, avoiding interference with bone fragment reduction and facilitating bone grafting.
- Cylindrical distal end with grooves to enhance cement fixation.

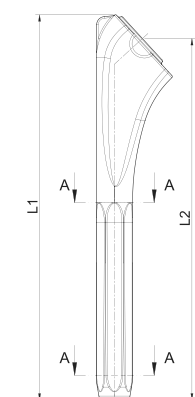
Features of Pathological Humeral Stem Products

Design Key Points

- Platform Design with Spherical Connection Interface Enables seamless conversion to anatomic or reverse shoulder arthroplasty without stem removal. Allows intraoperative adjustment of prosthetic anatomical parameters.
- Biological or Cement Fixation Provides stable fixation outcomes.
- The distal stem is cylindrical with grooves to reduce stiffness, and features a polished surface suitable for cement fixation.



- The proximal stem has a rectangular cross-section for excellent rotational stability, a sandblasted rough surface to meet biological fixation requirements, and provides 0.5mm press-fit.

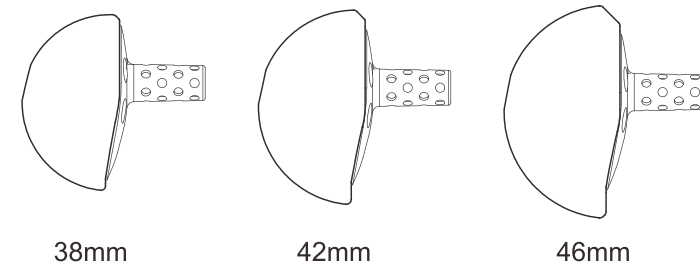


- The prosthesis has a built-in offset of 7.5mm. (Unit: mm)

Diameter/A	6.7	8.8	11	13	15	17
Stem Length/L2	100	105	110	115	120	125

Features of Reverse Shoulder Product Series

- The center of rotation is embedded within the glenoid surface.
- The glenoid component features a downward suspension design and a large-diameter glenosphere.

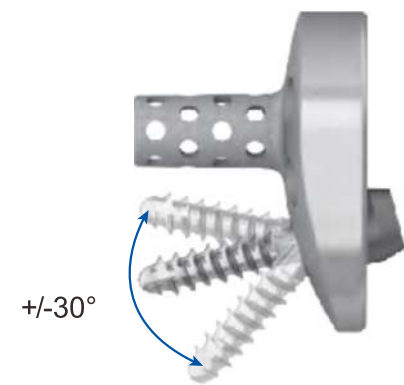


38mm

42mm

46mm

Reverse Glenosphere Screw

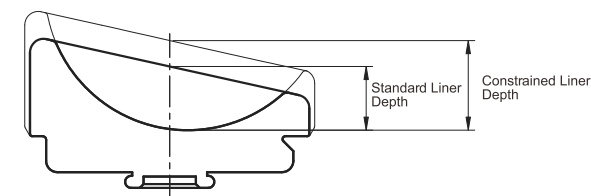


- Glenoid baseplate shape/screw configuration: Arcuate undersurface, Anatomical contour, Central bone cage

- Glenoid screws are compression screws with locking caps, measuring 4.5mm in diameter, with lengths ranging from 18-46mm in 4mm increments, and allowing +/-30° angulation.

- The humeral adapter plate and humeral liner have a minimum spacing of 9.6mm, with an overall offset range of +0mm to 17.5mm.

- The constrained humeral liner is 4mm deeper than the standard liner.



- Humeral Adapter Plate Offset: 0/5/10/15mm
Humeral Liner/Offset Increment:
Standard/Constrained: +0/+2.5mm
Total Offset Range: +0mm to 17.5mm



Reverse Humeral Adapter Tray Screw



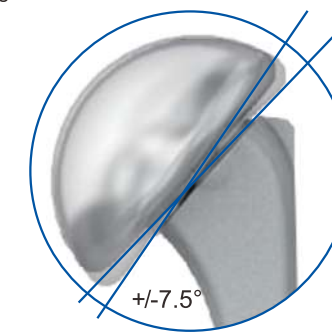
Features of TSA/ Hemiarthroplasty Shoulder Product Series

Anatomic Replicator

- The anatomic replicator allows independent adjustment of the humeral head inclination by +/-7.5°, resulting in a neck-shaft angle range of 125°-140° and a version range of +/-7.5°.

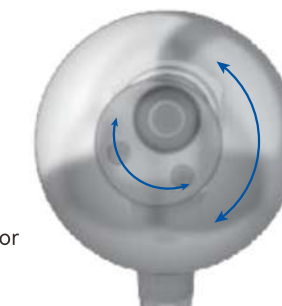


Anatomic Replicator Plate Screw



- The anatomic offset replicator comes in three sizes with built-in offsets of 1.5mm and 4.5mm respectively.

- When paired with the humeral head prosthesis, it enables the center of the humeral head to be offset relative to the humeral stem axis:
Mediolateral offset: 0-14mm (medial offset) Anteroposterior offset: +/-6mm (posterior offset)



- Each diameter of the humeral head offers multiple height options (16mm-28mm), allowing surgeons to adjust soft tissue tension accordingly.
- No humeral stem trial testing or back-table prosthesis assembly required—direct in vivo adjustment and assembly.
- The shoulder system offers various types of glenoid prostheses, including keeled, pegged, and 8° posterior-augmented glenoid liners.



- The glenoid prosthesis features an anatomical pear-shaped design. Based on size, it is categorized into four models: Small, Medium, Large, and Extra-Large. Each model is further divided into two types based on articular surface radius: α and β .

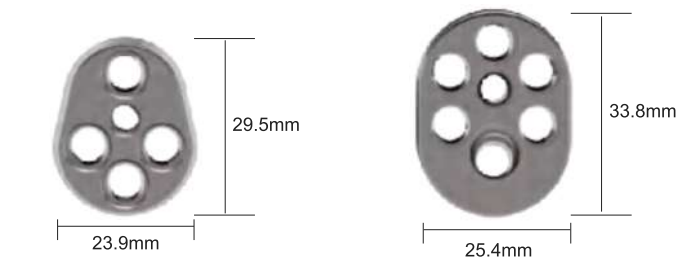
Head Diameter	38	41	44	47	50	53
Types of Glenoid Prostheses	α			β		



Reverse shoulder pear-shaped glenoid baseplate

The existing shoulder system's glenoid baseplate was refined to create a new reverse shoulder baseplate for better anatomy. CT analysis guides its use in patients with smaller glenoids, while keeping the system's key features.

Feature 1: Anatomical pear-shaped glenoid baseplate — 25% smaller than standard.



Feature 2: Compatible with revision surgery and offers multi-angle defect-filling adapter plate options.



Feature 3: Unique glenoid baseplate design

- Bone cage design enables bone grafting, osseointegration, and biological fixation.
- Variable-angle screws ($\pm 30^\circ$) with compression caps enhance initial glenoid stability.
- Offers multiple solutions for glenoid bone defects.
- Curved back design minimizes bone removal.
- Arced baseplate converts shear stress into compressive stress.



Specification

Angel Reverse Humeral Liner (PEHL I)/Angel Reverse Constrained Humeral Liner (PEHL II)	36+0, 36+2.5	38+0,38+2.5	40+0, 40+2.5	
Angel Reverse Glenosphere, S (CGH II)	36	38	40	
Angel Reverse Glenoid Plate	Angel Reverse Glenosphere Screw (TGHS I)+Angel Reverse Glenoid Plate, S (TGP II)			

Anatomical pear-shaped glenoid baseplate

Angel Reverse Glenoid Plate, 20.9mm S

Angel Reverse Glenoid Plate, 30.9mm S

Angel Reverse Superior Augment Glenoid Plate

Angel Reverse Superior Augment Glenoid Plate, 29.1mm (10°)

Angel Reverse Posterior Augment Glenoid Plate, 26.4mm, L

Angel Reverse Superior/Posterior Augment Glenoid Plate, 34.5mm, LUB

Angel Reverse Superior/Posterior Augment Glenoid Plate, 34.5mm, RUB

Reverse Shoulder Set

(Unit: mm)

Humeral Stem THS	Type	Cemented Humeral Stem						Extended Revision Cemented Humeral Stem				Cemented Platform Fractured Humeral Stem L/R						Cemented Fractured Humeral Stem L/R			
	Stem Length	107	112	117	122	127	132	175	200	200	215	120	140			200	140			200	
	Diameter	6.7	8.8	11	13	15	17	8	10	12	8	6.5	8.5	10.5	12.5	6.5	7	9.5	12	7	
	Offset	7.5		8.5		9.5		8				/									
Humeral Adapter Tray	Type	Inverted humeral stem adapter tray														Fractured humeral stem adapter tray					
	Offset	+0、+5、+10、15														0					
Adapter Tray Locking screw	Type	Inverted humeral stem adapter tray locking screw														Fractured humeral stem adapter tray locking screw					

Fitting relationship between humeral liner and glenosphere

(Unit: mm)

Humeral Liner	Diameter	38			42		46		
	Offset	+0	+2.5		+0	+2.5	+0	+2.5	
Limited Humeral Liner	Diameter	38			42		46		
	Offset	+0	+2.5		+0	+2.5	+0	+2.5	
Inverted Glenosphere	Diameter	38			42		46		
Inverted Glenosphere Locking Screw	Type	Inverted glenosphere locking screw							
Inverted Glenosphere Plate	Type	Press-fit fixed bone cage							
Glenoid Compression Screw Kit (φ4.5mm)	Length	18	22	26	30	34	38	42	46

Shoulder/half shoulder set

(Unit: mm)

Humeral Stem THS	Type	Cemented humeral stem						Extended revision cemented humeral stem				Cemented platform fracture humeral stem L/R					Cemented fractured humeral stem L/R			
	Stem Length	107	112	117	122	127	132	175	200	200	215	120	140			200	140			200
	Diameter	6.7	8.8	11	13	15	17	8	10	12	8	6.5	8.5	10.5	12.5	6.5	7	9.5	12	7
	Offset	8		9	9.5		8				/									
Anatomy Replicator	Offset	0mm、1.5mm、4.5mm														/				
Anatomical Replicator Screw	Type	Locking Screw																		

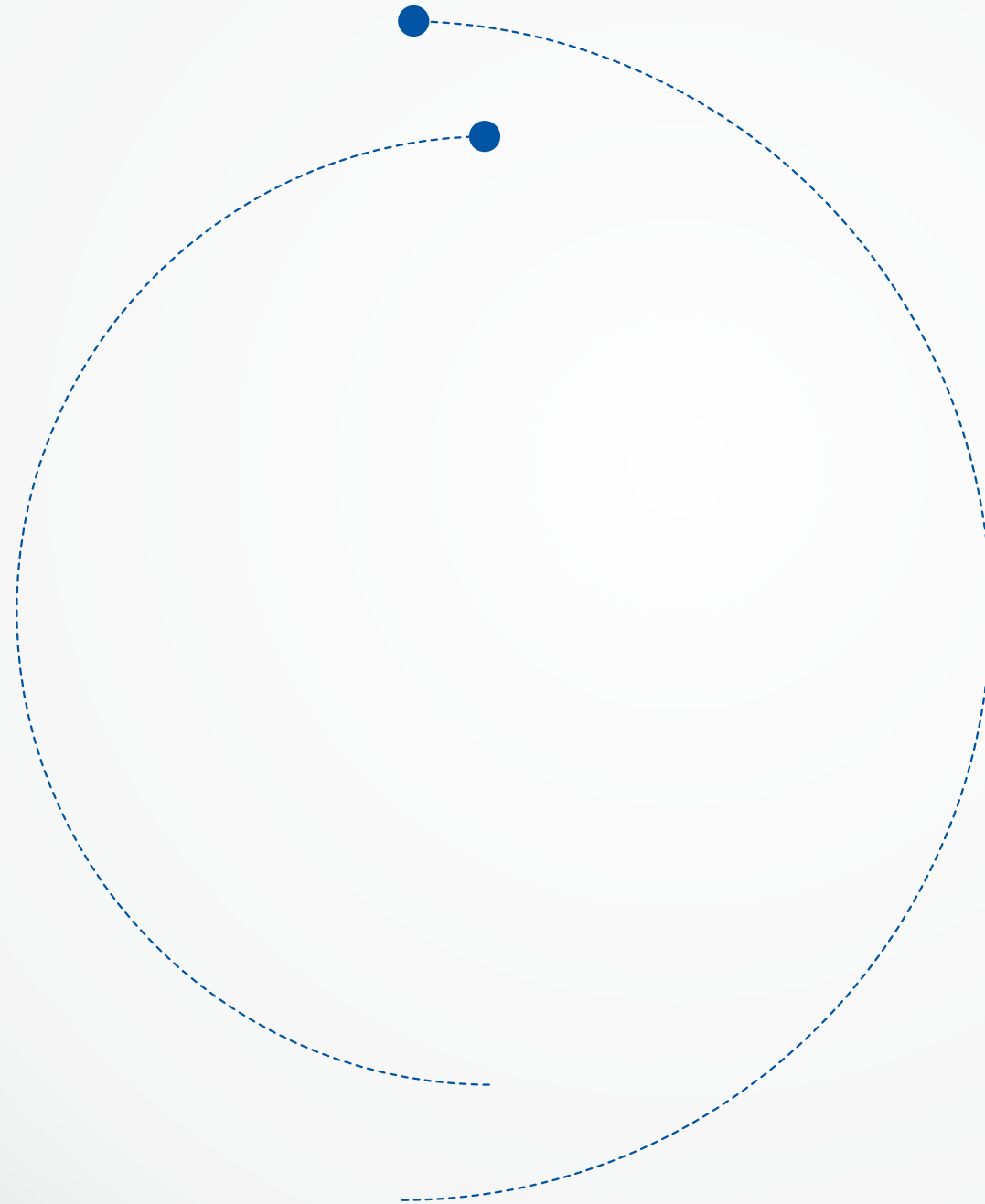
The relationship between the humeral head and the glenoid liner

(Unit: mm)

Humeral Head	Diameter	38	41	44	47	50	53
	Height	Low- 16	Low- 16	Low- 17	Low- 18	Low- 19	Low- 20
		High- 19	High- 20	High- 21	High- 22	High- 23	High- 24
Boned glenoid liner /Glenoid liner with fixation bolt	Small (Width*Height 22*30)	/	/	/	Ultrahigh- 26	Ultrahigh- 27	Ultrahigh- 28
		α Small			β Small		
		α Medium			β Medium		
	Large (Width*Height 30*39)	α Large			β Large		
8° rear enlarged glenoid liner (L/R)	Extra Large (Width*Height 32*44)	/			βExtraLarge(Withfixed-boltglenoidlineronly)		
	Small (Width*Height 22*30.0)	•	•	•	•		
	Medium (Width*Height 26*35)		•	•	•	•	
	Large (Width*Height 30*39)			•	•	•	•
	Extra Large (Width*Height 32*44)			•	•	•	•

04

— Ankle



Ankle Replacement System

The Total Ankle System is intended to give a patient improve mobility by reducing pain, restoring alignment and replac - ing the flexion and extension movements in the ankle joint.

Ankle joint replacement components consist of a talar dome, a tibial Tray, and a UHMWPE Insert. Components are available in a variety of sizes and design configurations.



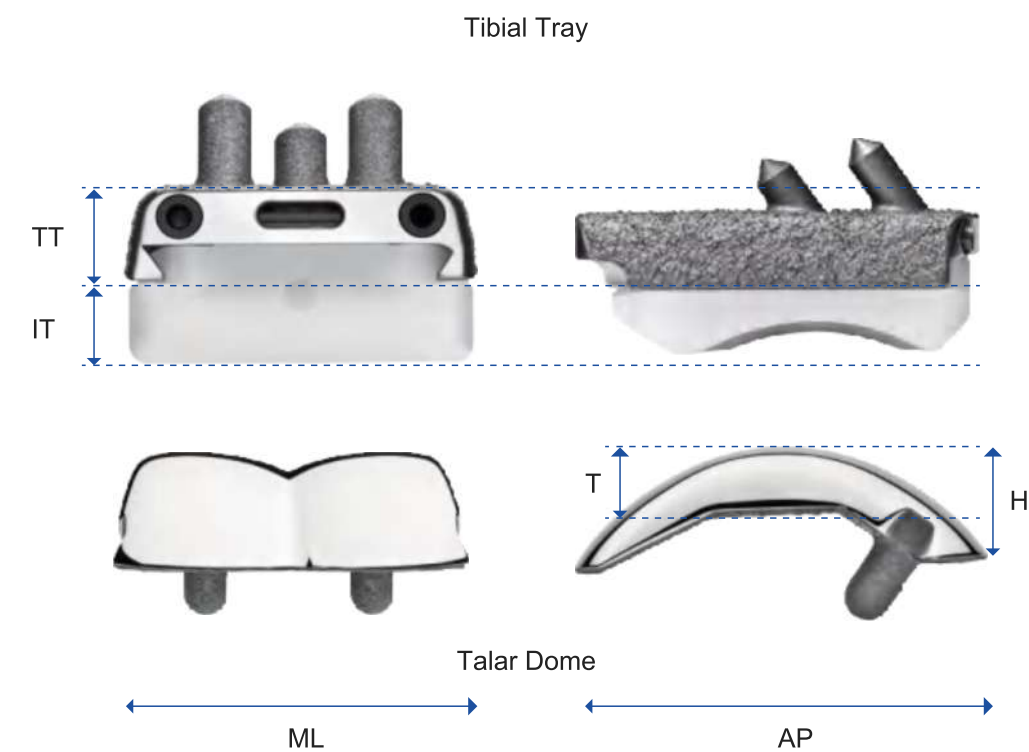
Excellent Fixation Tibial Tray
Ti-coated surface promotes bone ingrowth, improved long-term stability.



Low Wear Insert
UHMWPE inserts designed for extremely low wear performance.

Versatile Talar Dome Options
Available in flat-cut and chamfered-cut configurations to address a range of clinical requirements.

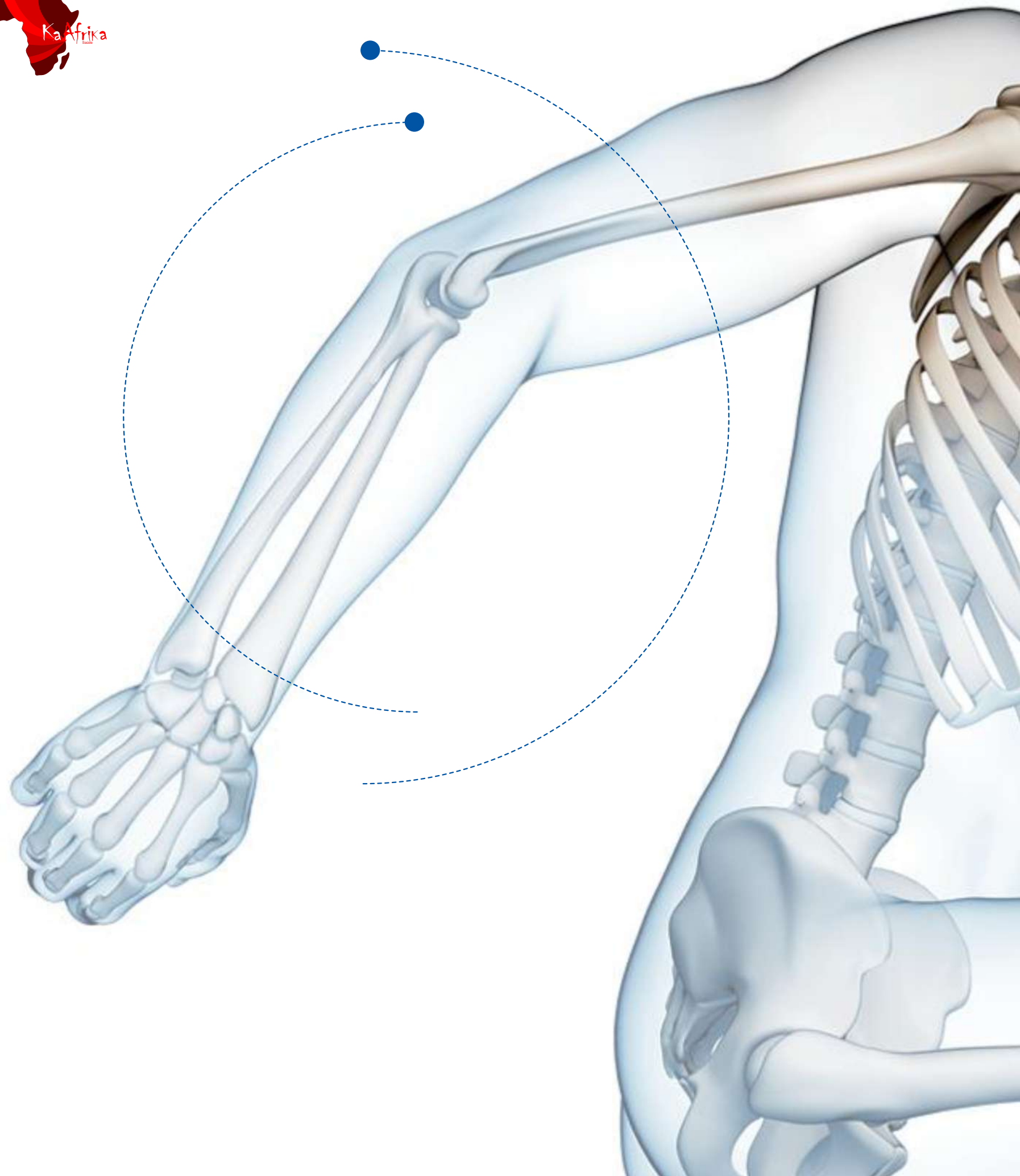
■ Specification



(Unit: mm)

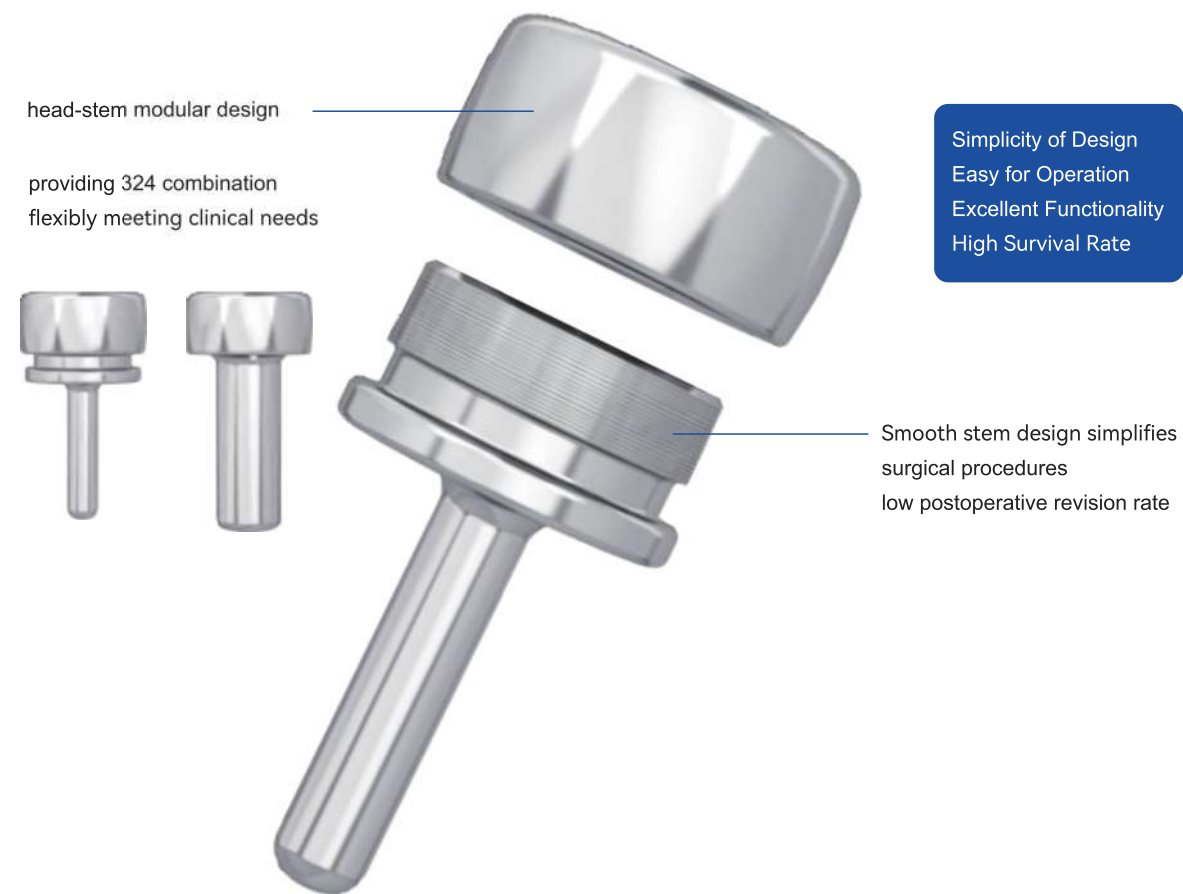
	Tibial Tray			Insert	Talar Dome			
Size	ML	AP	Thickness(TT)	Thickness(IT)	ML	AP	Thickness(T)	Height(H)
1#	26	34	5	6,8,10,12	30	31	5	10
2#	26	38			32	34	5	10
3#	28	38			34	36	5	10
3+#	28	41			XX			
4#	31	41			36	39	6	11
4+#	31	44			XX			
5#	34	44			38	42	7	12
5+#	34	48			XX			

05 — Elbow



Radial Head System

Radial head replacement systems are highly specialized implants designed to restore elbow joint function after severe, irreparable fractures or degenerative conditions. The key takeaway is that no single system is universally superior; the optimal choice depends on the surgeon's preference, the patient's anatomy, and the specific clinical scenario.

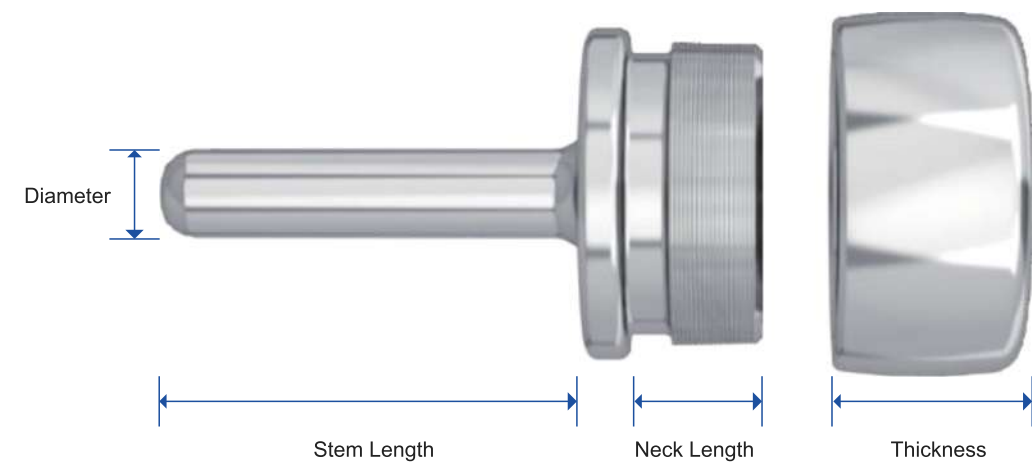


Provides effective clinical solutions to restore good postoperative function

- Failure to achieve good reduction and stable fixation for radial head fractures;
- The sequelae after radial head resection surgery;
- Revision surgery after failed radial head arthroplasty;
- Treatment of degenerative or post-traumatic disabilities with pain, joint stiffness, limited joint mobility, and

X-ray findings of joint destruction and/or subluxation in the radial humeral and/or radial ulnar joints conservative treatment is ineffective;

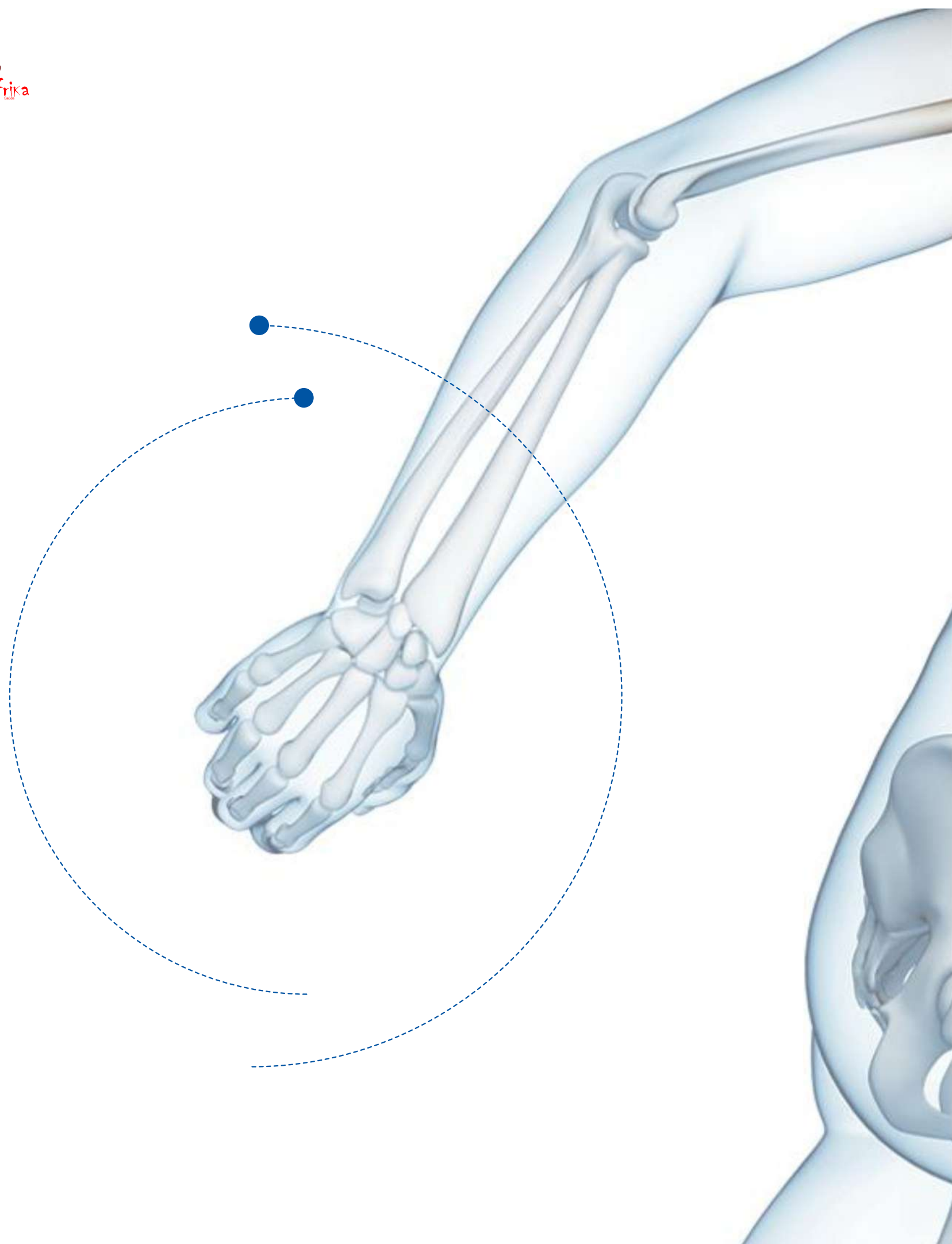
■ Specification



(Unit: mm)

	Neck Length Thickness	0	2	4
	Diameter			
Radial Head	18	18	18 +2	18 +4
	20	20	20 +2	20 +4
	22	22	22 +2	22 +4
	24	24	24 +2	24 +4
	26	26	26 +2	26 +4
	28	28	28 +2	28 +4
Radial Stem	4.5	4.5	4.5 +2	4.5 +4
	5.5	5.5	5.5 +2	5.5 +4
	6.5	6.5	6.5 +2	6.5 +4
	7.5	7.5	7.5 +2	7.5 +4
	8.5	8.5	8.5 +2	8.5 +4
	9.5	9.5	9.5 +2	9.5 +4

06 — Finger



Leading Manufacturing Standards

Precision Engineering Exceeds International Standards, Intelligent Manufacturing Leads Global Healthcare

Quality Policy

Adhering to the quality policy of "Quality First, Scientific Management, People-Oriented, and Pursuit of Excellence."

Smart Manufacturing

Establish an integrated information management platform that combines design, process, manufacturing, and quality control to achieve digital transformation and upgrading.

Equipped with over 1,600 internationally top-tier R&D testing and precision machining devices, and established automated production lines to enhance lean management capabilities and intelligent manufacturing proficiency.



Haas (U.S.) Five-Axis Machining Center



DMG Mori Turning-Milling Compound Equipment



Schütte (Germany) Five-Axis CNC Grinding Machine



Tornos (Switzerland)



Double Medical



Automatic Screw Appearance Inspection Equipment



Dual-Spindle, Dual-Station, Dual-Turntable CNC



Automated Loading and Unloading Robotic Arm



Automatic Joint Sandblasting Station

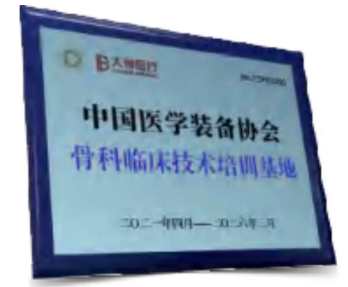
System Certification

Certified with international medical quality management systems including ISO 13485, MDSAP, EU CE, and South Korea GMP, and passed on-site inspections by the U.S. FDA.



Pioneer in Technical Services

Establish a clinical academic exchange platform to promote the upgrading of localized medical services.



High Configuration

- Simulated operating rooms (dry/wet zones)
- Multifunctional teaching areas (live broadcast studio, conference rooms, lecture halls, etc.)
- Online live broadcast platform support

This setup creates a dual-platform (online + offline) collaborative training and education system, enabling seamless cross-regional academic exchange.

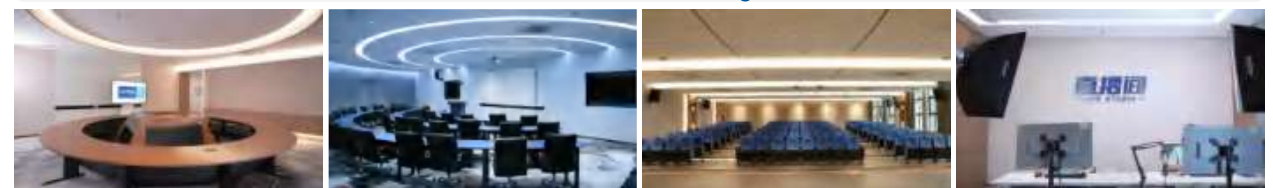
Simulated Operating Room



Multifunctional

Integrating functions such as live animal training, ex-vivo organ practice, simulated models, and synthetic bone-hands-on, this facility supports multidisciplinary clinical training. Simultaneously, it focuses on addressing clinical pain points, complex procedures, and innovative techniques by developing meticulously designed training courses. With the goal of standardizing practical skills, it is committed to establishing a world-class clinical academic exchange and technical training base, providing comprehensive and systematic educational services for clinicians.

Multifunctional Teaching Area

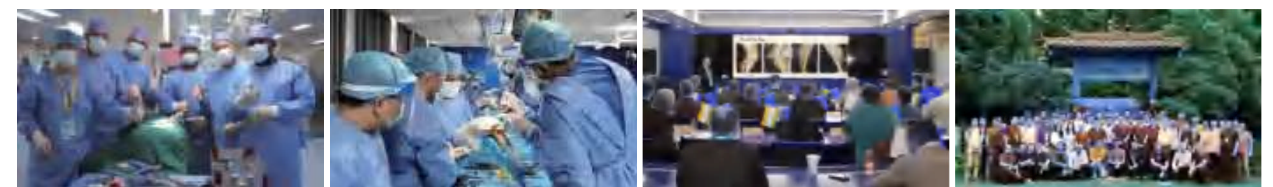


Multidisciplinary

Covering orthopaedic trauma, spine, joints, sports medicine, minimally invasive surgery, neurosurgery, wound repair surgery, dentistry, and other fields.

Internationalization

Providing a high-level, international platform for exchange and collaboration, actively promoting technical exchanges between domestic and foreign clinical experts, disseminating China's excellent medical products and sophisticated technologies, and contributing Chinese wisdom to global medicine.



Full Product Line Coverage

Focusing on the medical field to build a diversified product portfolio.

Trauma

- Upper Extremity
- Lower Extremity
- Hand and Foot
- External Fixation
- Pediatric
- Others

Spine

- Anterior Cervical
- Posterior Cervical
- Anterolateral Thoracolumbar
- Open Posterior Thoracolumbar
- Minimally Invasive Posterior Thoracolumbar
- Vertebroplasty
- Fusion Product Systems

Joints

- Shoulder Joint
- Elbow Joint
- Hip Joint
- Knee Joint
- Ankle Joint
- Finger

Sports Medicine

- Suture Anchor Systems
- Loop Plate Systems
- Interference Screw Systems
- Meniscal Suture Systems
- Sutures for Repair
- Arthroscopy Equipment and Consumables
- Surgical Instruments

Minimally Invasive Surgery

- Access Series
- Stapler Series
- Breast Biopsy Series
- Hemostasis Series
- Equipment Series

Wound Repair Surgery

- Pulsed Irrigation Series
- Micro-Negative Pressure Product Systems
- Negative Pressure Wound Dressing Series



Dental

- Implant System Series
- Implant Prosthetic Series
- Bone Augmentation Series
- Orthodontics Series
- Specialized Instrument Series

Neurosurgery

- Skull Defect Repair
- Skull Fixation
- Auxiliary Tools
- Spinal Cord and Spine

Hernia Surgery

- Polypropylene Mesh Systems
- Partially Absorbable Mesh Systems
- Hernia Surgery Auxiliary Tools

Maxillofacial Surgery

- Midfacial Trauma
- Mandibular Trauma
- Orthognathic Systems
- Mandibular Distractors

Chest Wall Surgery

- Thoracic and Rib Fixation Systems
- Minimally Invasive Tools for Thoracic and Rib Procedures

Dedicate Smart Joint Replacement Robot

Multiple Applications in A Single System



Cut Guide is Not Required



Virtual Stereotactic Boundary



Virtual Stereotactic Boundary

Next-Gen of Power Tool

Compatible with DB Joint Prostheses



01.Greater Efficiency & Low Cost

Multiple Applications in A Single System, which reduces equipment investment, increases bed turnover, and maximizes operational efficiency.



02.Faster Recovery & Less Pain

Sub-millimeter clinical accuracy ensures precise positioning of implants, which reduces post-op pain and revision rates, shortens hospital stay, and eases family care burden.



03.Healthcare Equity

Standardized workflow shortens the learning curve, helping primary surgeons perform high-quality procedures and making advanced surgical care more widely available.

Case 1:Robot-Assisted TKA for Fused Knee



Pre-Op

Post-Op

Case 2:Robot-Assisted TKA for Severe Valgus Deformity



Pre-Op

Post-Op

**The Leader in China
for Orthopedic Total Solution**