



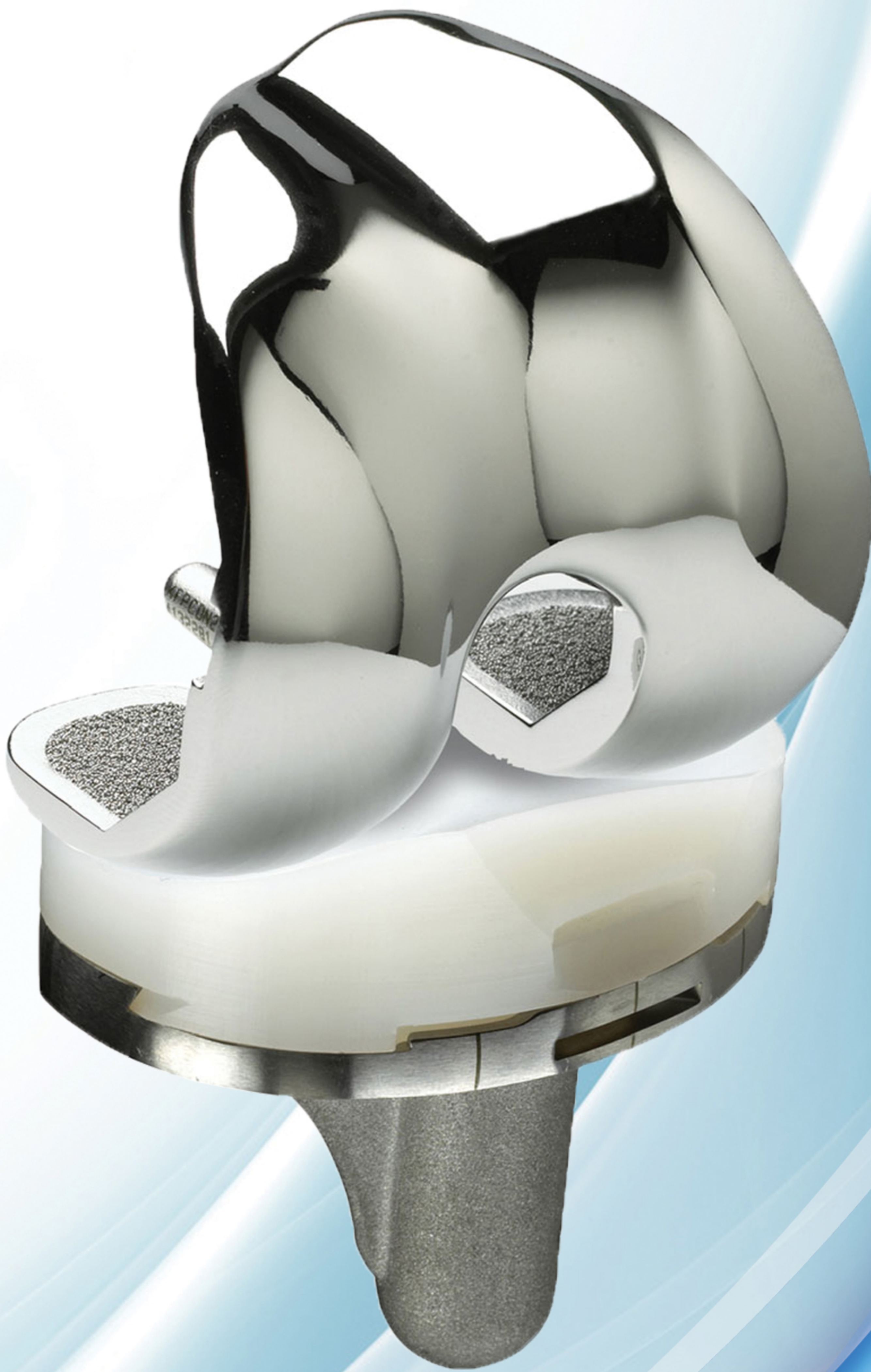
Forging ahead daily ✓



هر روز بهتر از دیروز ✓

KNEETA®

Total Knee system



Kavah Ave., Isfahan, Iran

CRM: +98(31) 345 20 330-1

www.sairanmed.ir

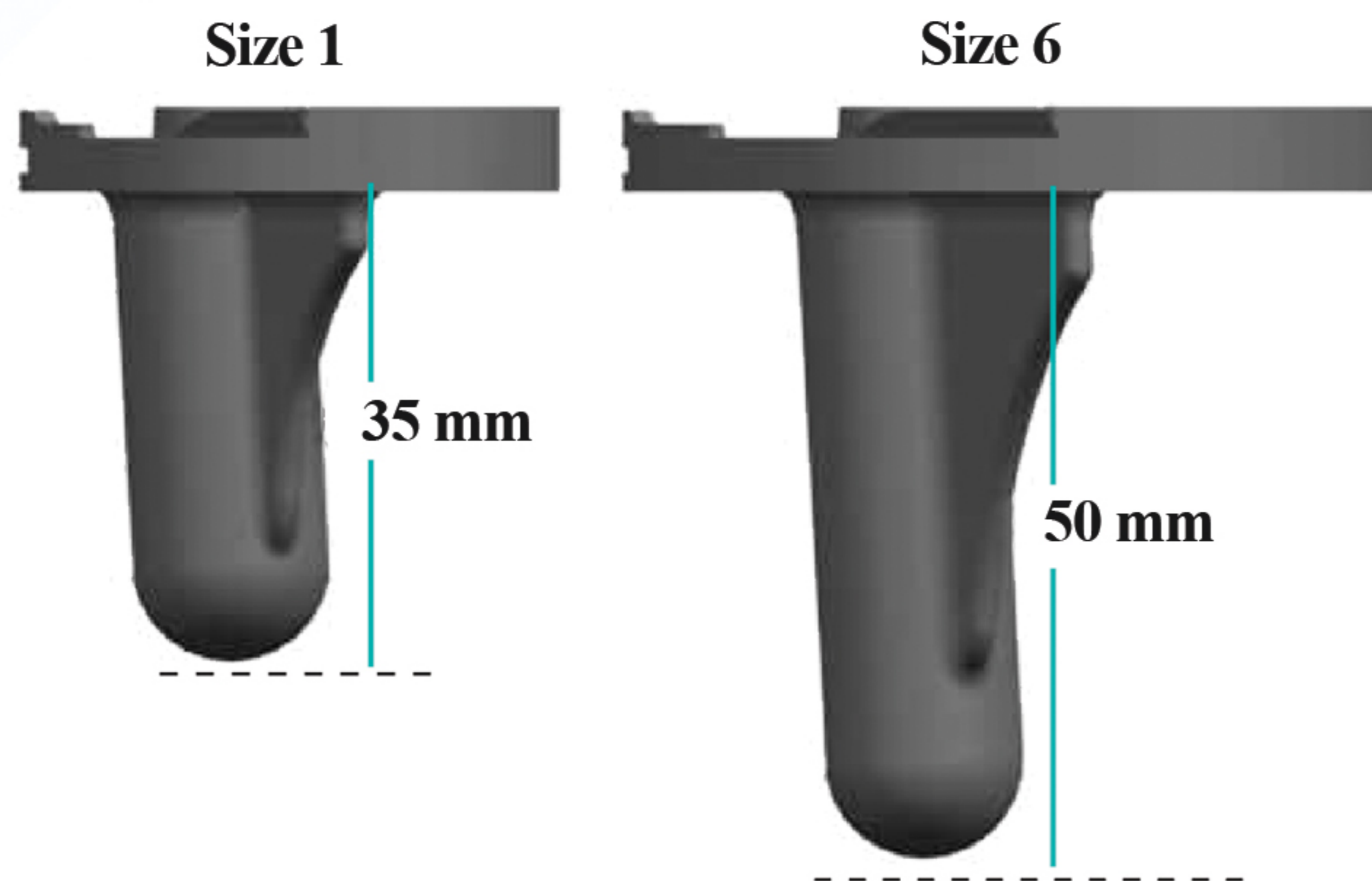


Forging ahead daily ✓

Keel

Proportional increase with sizes.

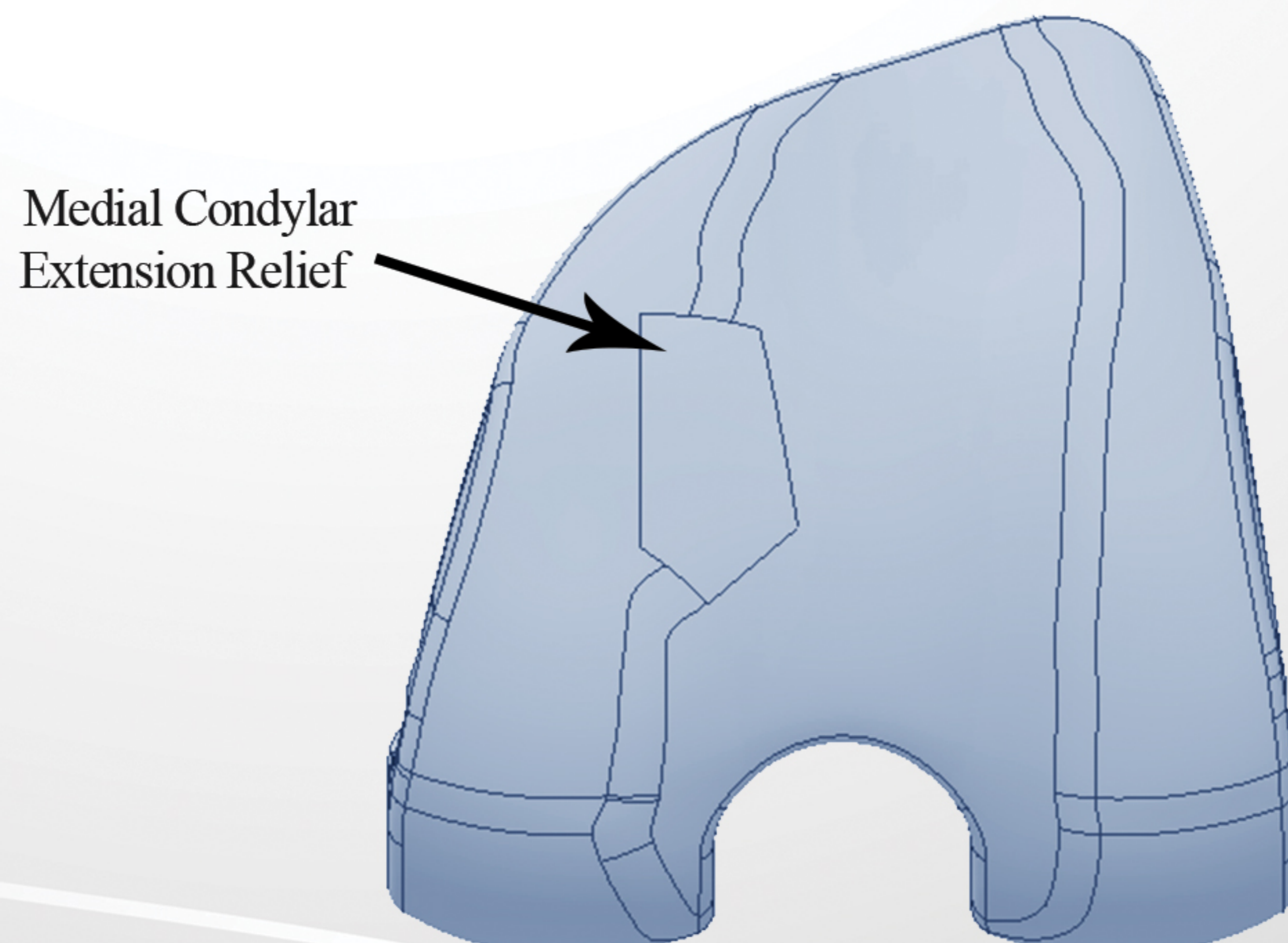
The tibial stem of the KneeTA[®] Medial-Pivot Knee System has been made increasing proportional with the size. This allows for easier insertion for the smaller components of the range.



Extension Relief

Indentation on the medial flange allows the surgeon to adjust posterior slope while still ensuring full extension.

An “extension relief” is built into the transition of the single radius of the medial condyle to permit clearance with the anterior lip of each tibial insert. This indentation allows for optimized stability and contact area and is intended to reduce pain and risk of impingement during hyperflexion.



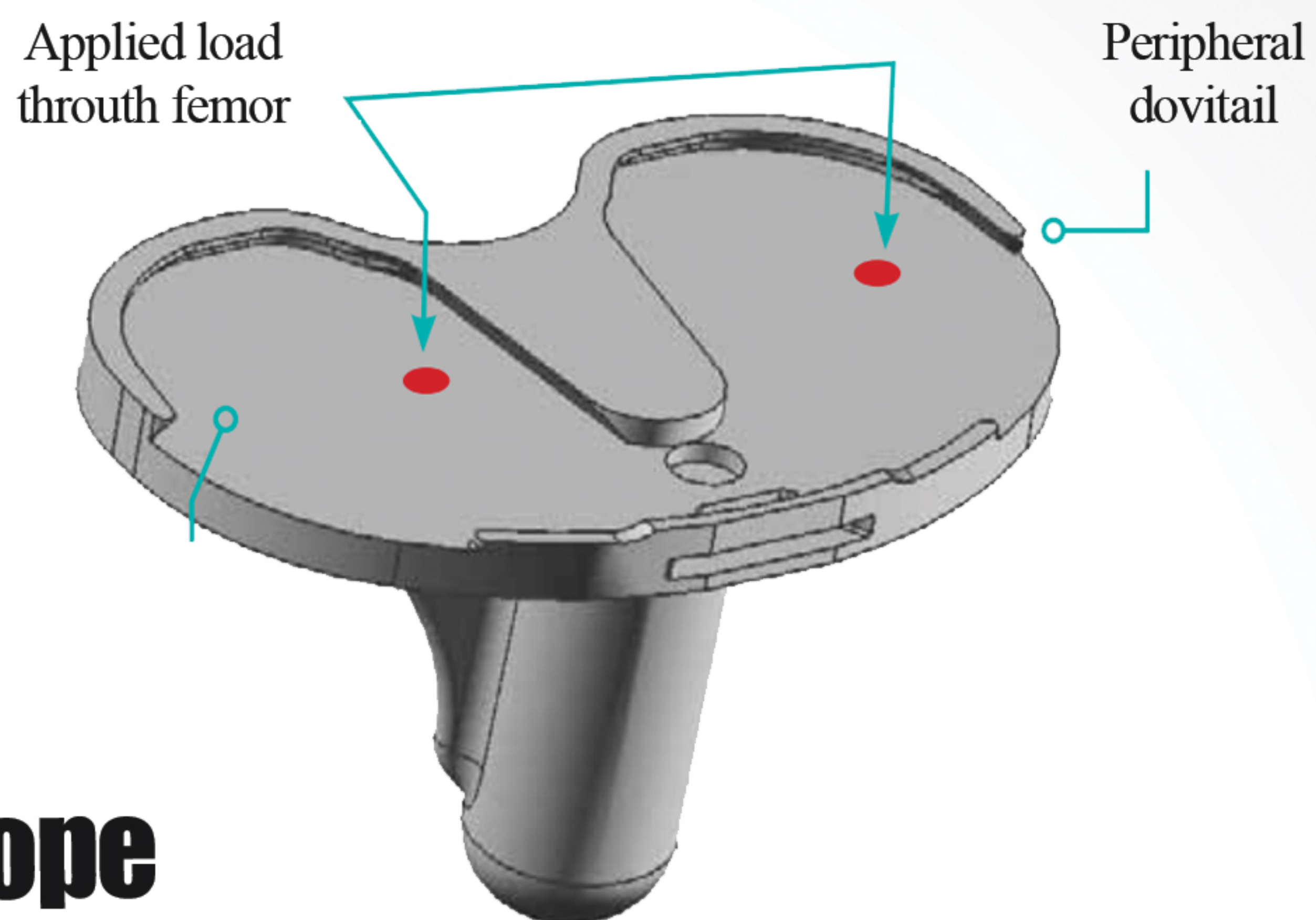


Forging ahead daily ✓

Dovetail Locking Mechanism

Dovetail capture reduces micromotion

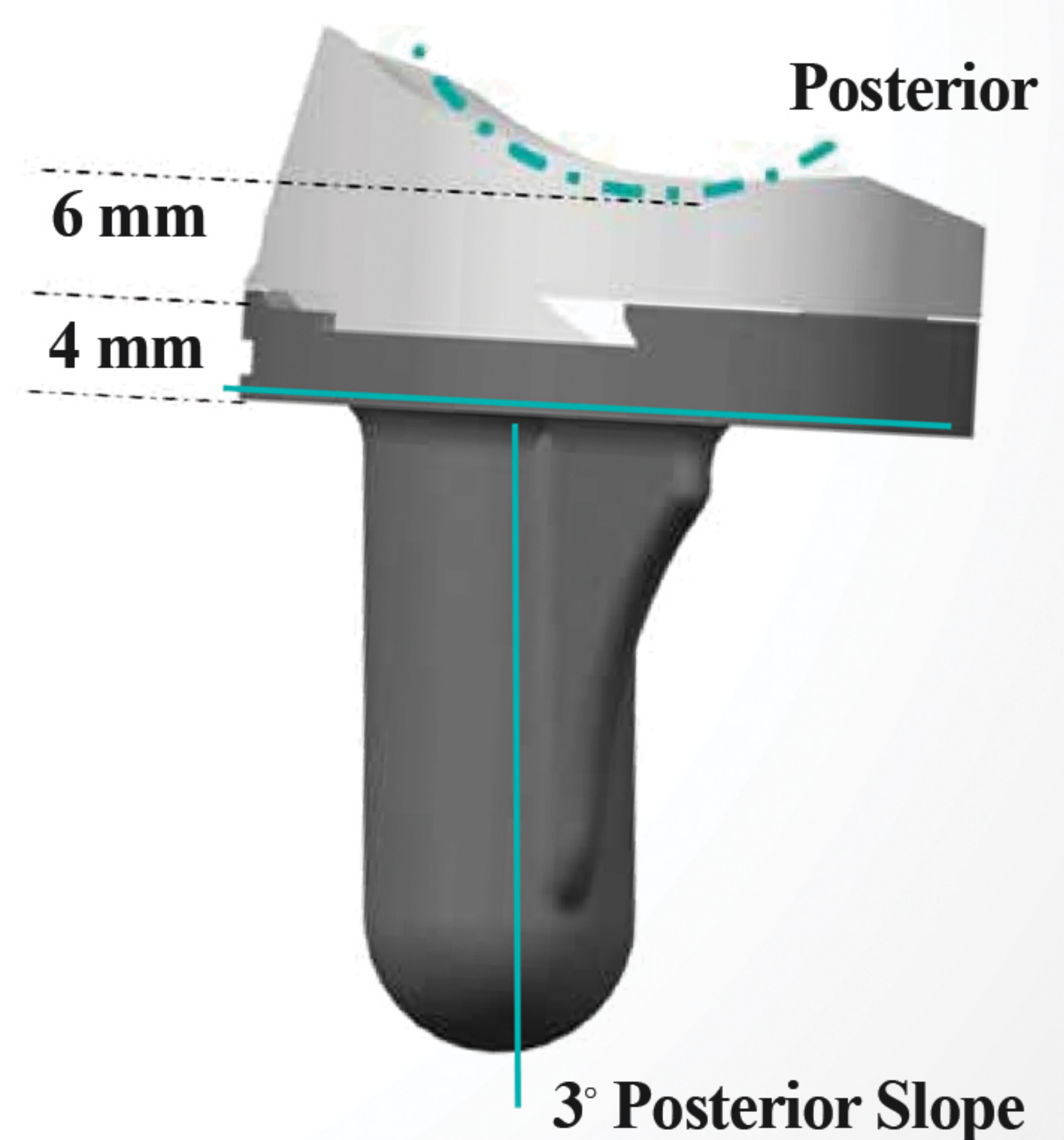
The locking mechanism of the KneeTA[®] Knee System relies on a dovetail capture and an interference fit to reduce micromotion.



Built-In Posterior Slope

Stem and keel incorporate 3° posterior slope.

The KneeTA[®] Medial-Pivot tibial base keels are angled 3° posteriorly. This ensures that even if posterior slope is resected on the proximal tibia the keel is oriented properly down the cortex of the tibia. The thickness of the tibial base implant is 4mm. This number correlates to the thickness of the selected tibial insert thickness.



For instance, if a 10mm thick insert is selected, the actual thickness of the bearing surface is 6mm. The 10mm thickness read on the label is actually a combination of the insert base thickness and the bearing surface thickness.

The KneeTA[®] Medial-Pivot tibial inserts have 0° slope build into the implant: the articular surface is parallel to the bottom of the insert.



Forging ahead daily

KneeTA Components

Femoral

	Size	A	B	C
	1	60	52	8
	2	65	57	8
	3	70	62	8
	4	75	66	8
	5	80	71	8
	6	85	76	8

CoCr femoral components accommodate patient anatomy, restore natural patellofemoral function, maximize fixation and enhance stress distribution.

Tibial

	Tray Size	A	B	C	Insert Size
	1	60	41	35	1
	1+	65	44	35	1
	2	65	44	35	2
	2+	70	48	43	2
	3	70	48	43	3
	3+	75	51	43	3
	4	75	51	43	4
	4+	80	54	50	4
	5	80	54	50	5
	5+	85	58	50	5
	6	85	58	50	6

The CoCr Tibial Trays are available in 11 sizes (6 regular sizes, 5 “plus” sizes).

Patellar

	Size	Single Peg	Tripeg	Thickness (mm)
	25 Recesed	●	N/A	7 or 9
	26	N/A	●	8
	28 Recesed	●	N/A	7 or 9
	29	N/A	●	8
	32	●	●	8
	35	●	●	8
	38	●	●	10
	41	●	●	11

Patellar components are completely interchangeable with any size femoral component, improving the flexibility required to match patient anatomy and available bone with implant size.



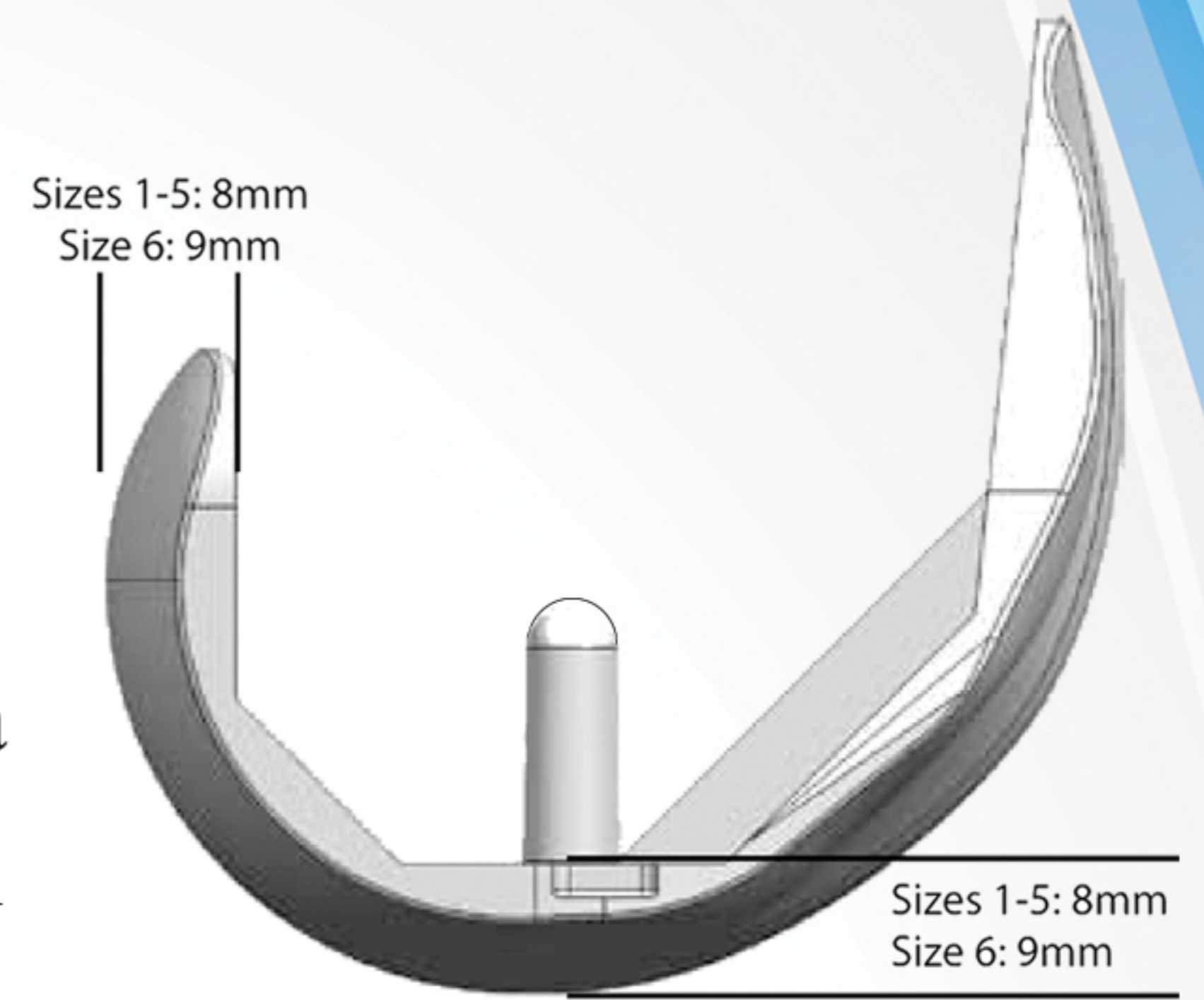
Forging ahead daily ✓

Posterior Condyles

Allows for greater contact area up to 90° of flexion

Thick posterior condyles allow for achievement of maximum but also require sacrificing femoral bone.

The KneeTA[®] femoral condyles have been designed to compromise between conservation of posterior femoral bone and achievement of good flexion potential. The constant thickness for the KneeTA[®] posterior condyles allows for a smooth blending radius and an increased contact area in flexion in comparison to competitor's design.

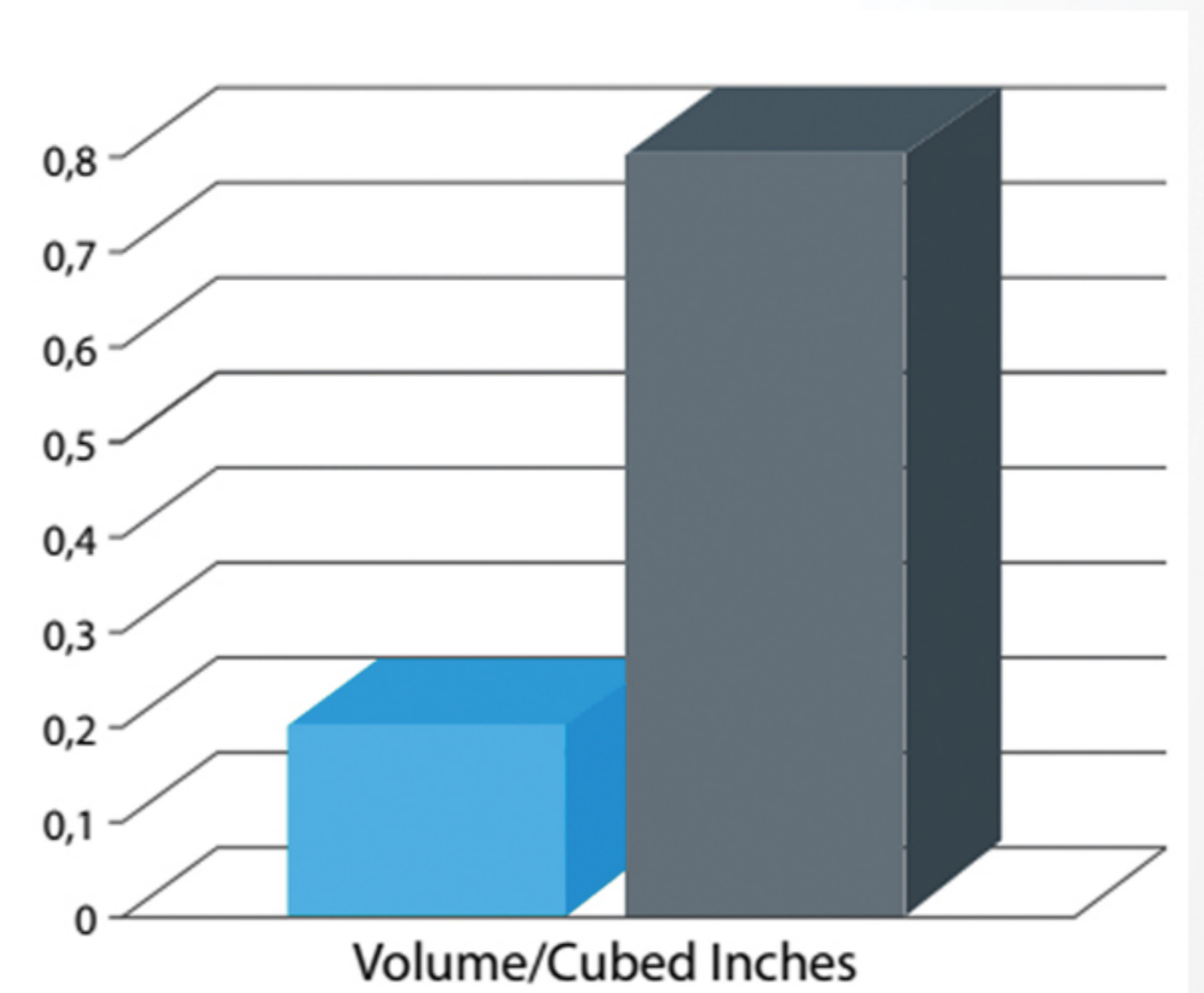


Bone Conservation

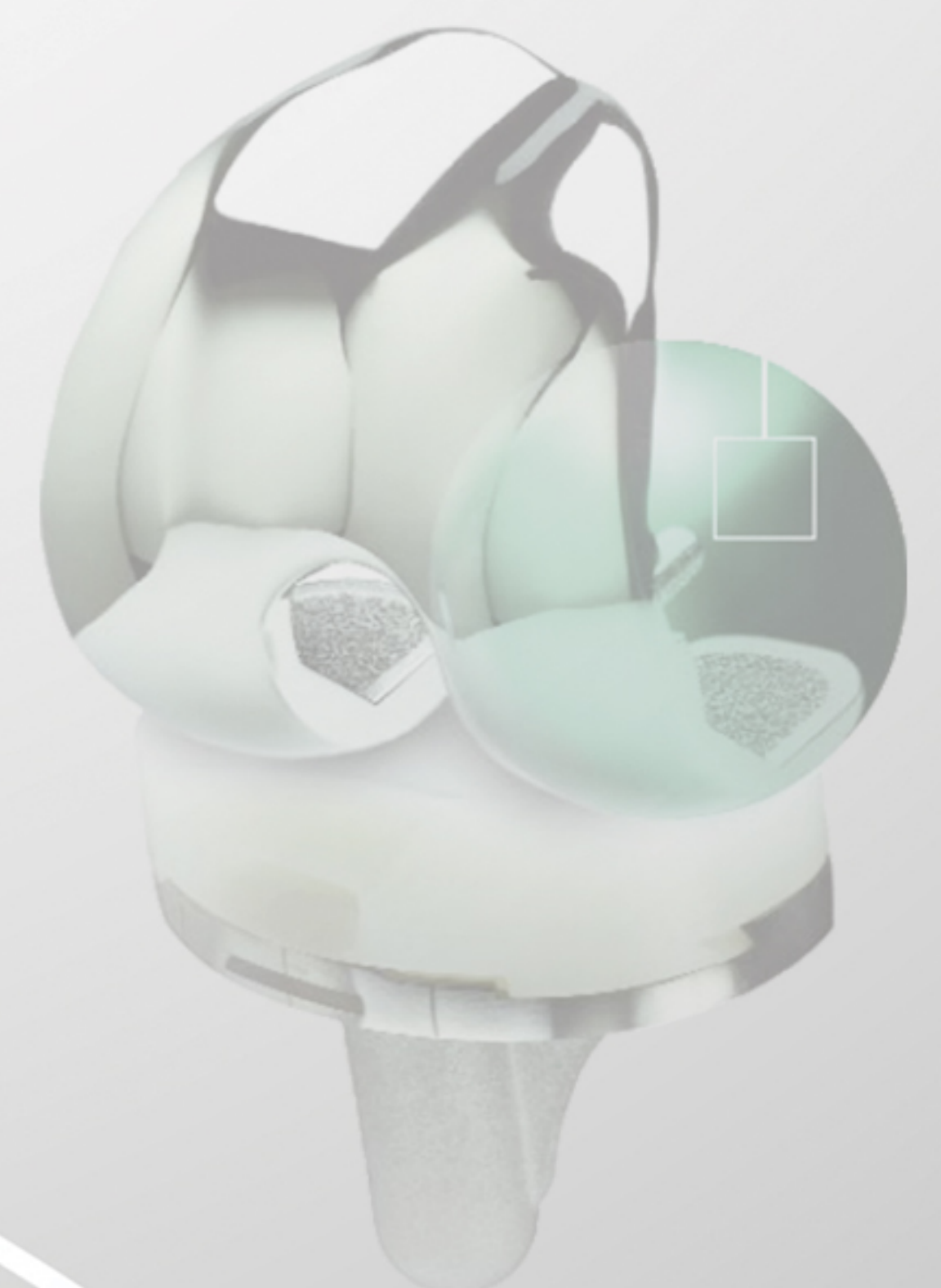
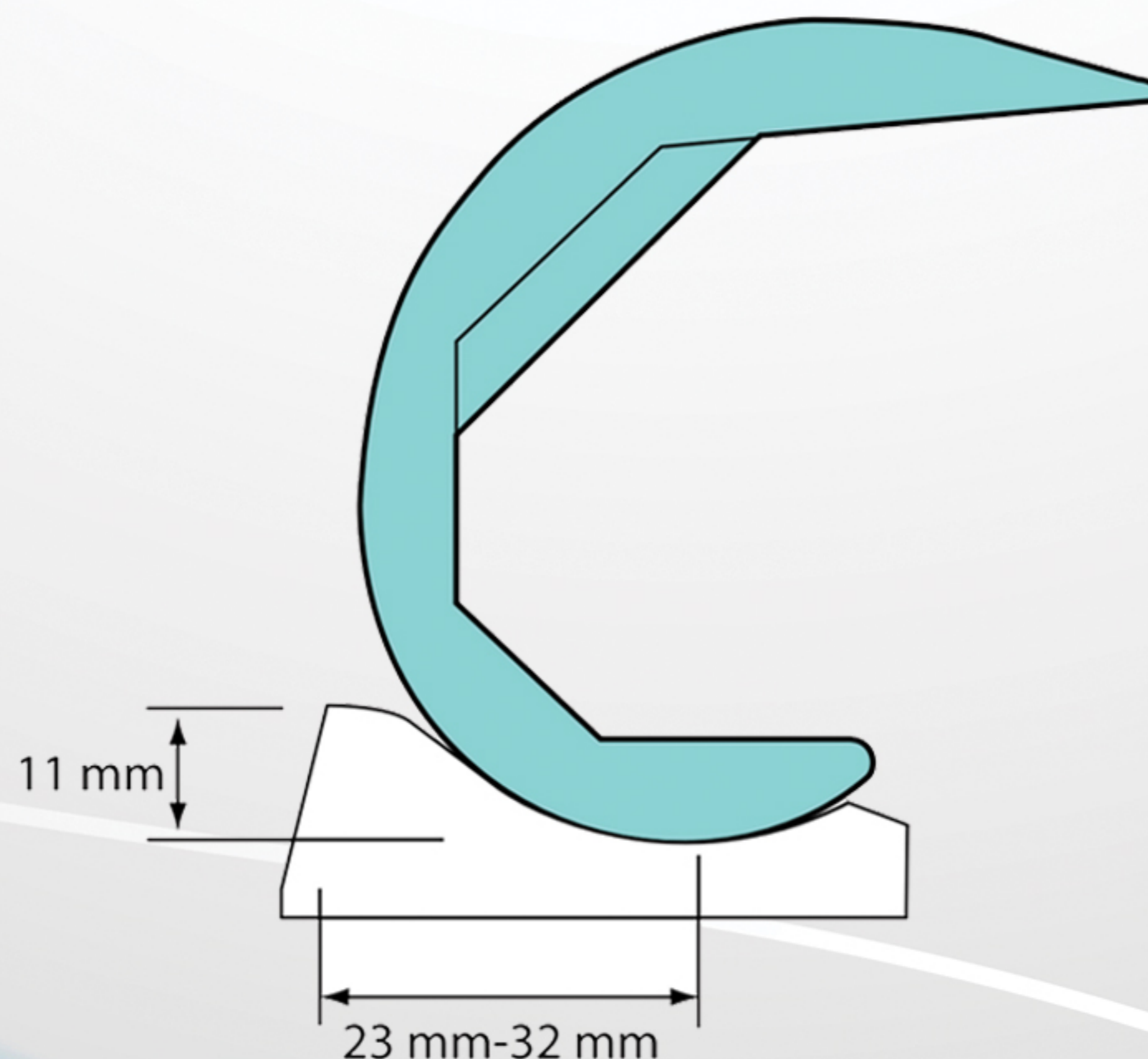
Designed to substitute the PCL and not sacrifice bone

As a posterior cruciate sacrificing device, the KneeTA[®] insert is more bone conserving than traditional posterior stabilized knees which requires resection of the femoral bone for the spine/cam mechanism engagement.

Instead of a traditional spine/cam mechanism, the insert features an anterior lip which provides a vertical jumping distance of 11mm for all sizes. The horizontal jumping distance for this lip is size dependent, and varies between 23mm-32mm.



■ **Medial Pivot**
■ **Traditional PS**





Forging ahead daily ✓

Trochlear Groove

Optimizes patellar tracking

The trochlear groove features a lateral anatomic flare designed to optimize the patella tracking. This trochlear groove has been designed with the intent of minimizing strain in the lateral retinacular. The trochlear groove features a lateral anatomic flare designed to tissues and decreasing the need for lateral retinacular releases.



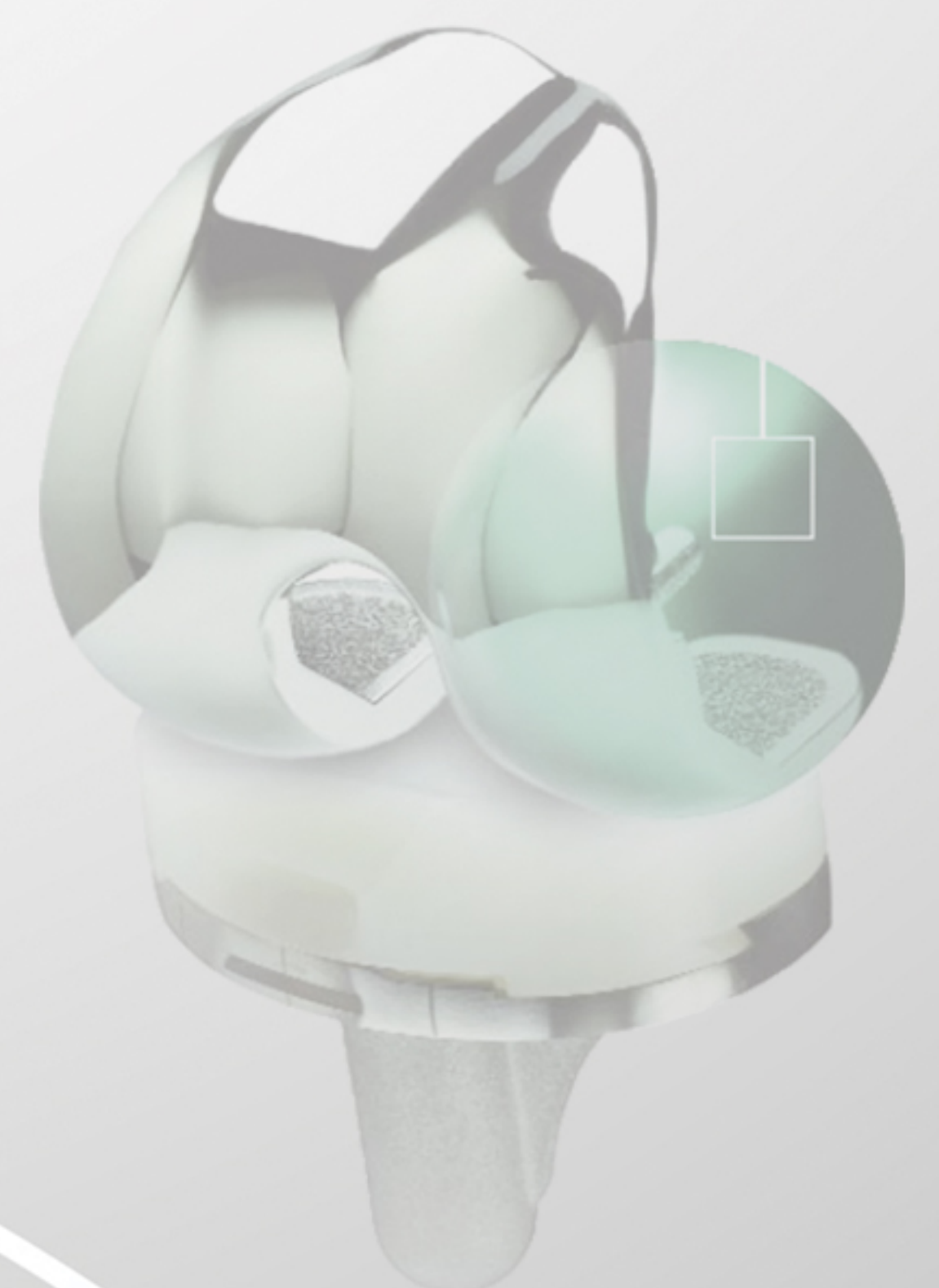
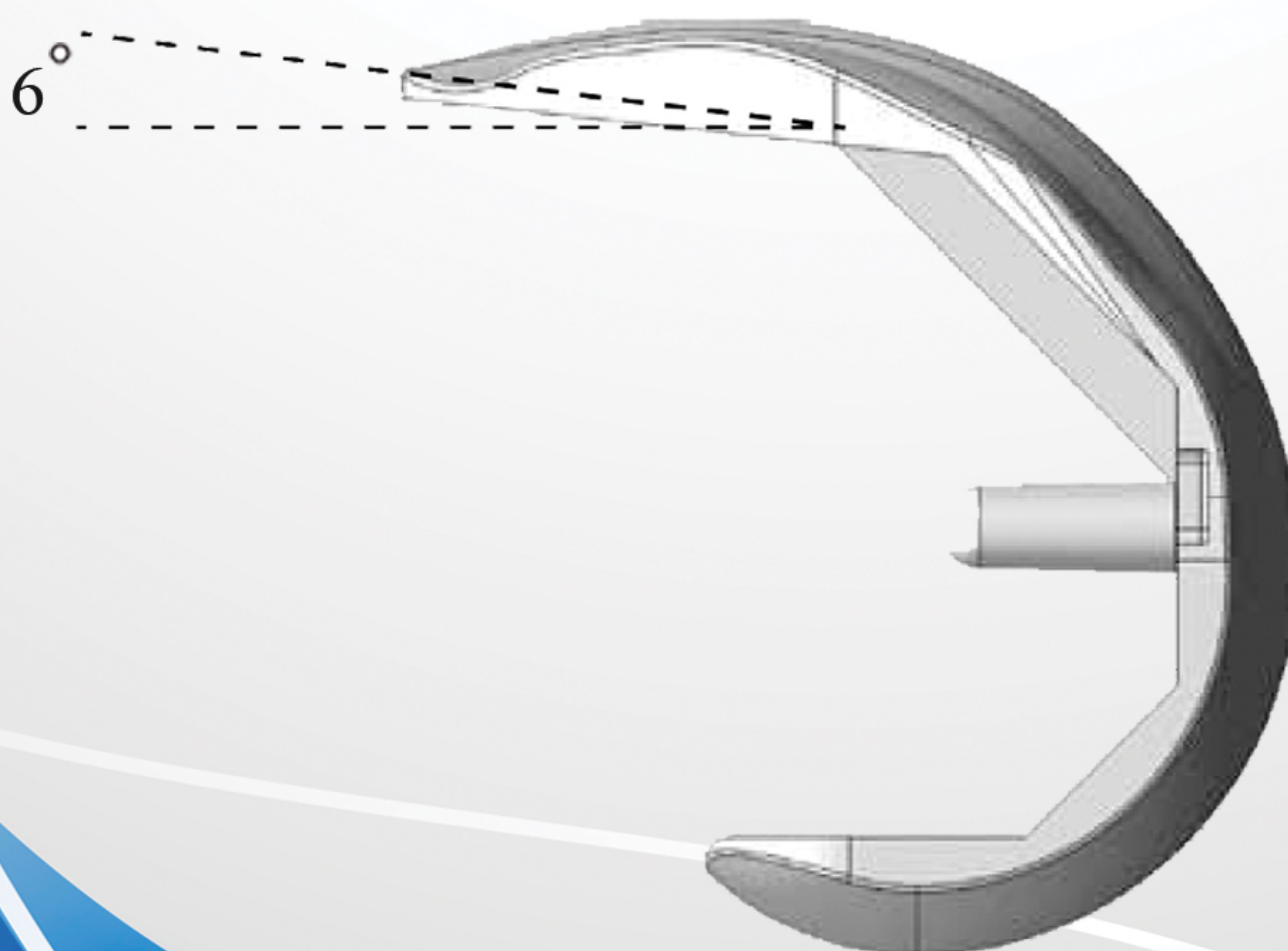
A lateral anterior flange which rises 2mm-6mm above the floor of the trochlear groove provides resistance to lateral subluxation. This design feature maintains patellar tracking in the early stages of flexion.



Anterior Flange

Designed to prevent femoral notching..

The anterior flange of the femoral implants for the KneeTA® Knee System is configured at a 6° angle. This angle of this anterior flange resection is designed to help the surgeon avoid notching of the anterior cortex.



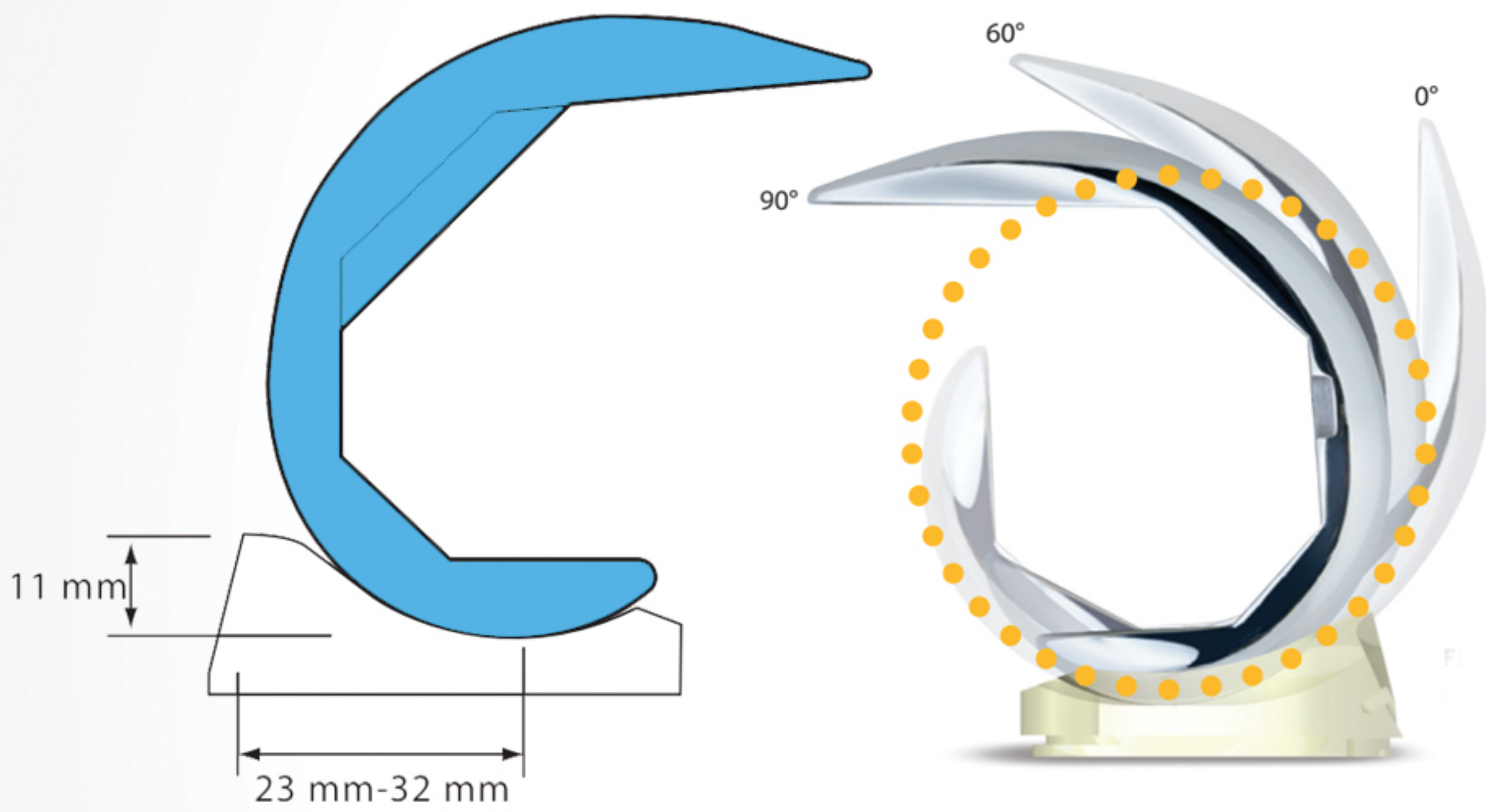


Forging ahead daily ✓

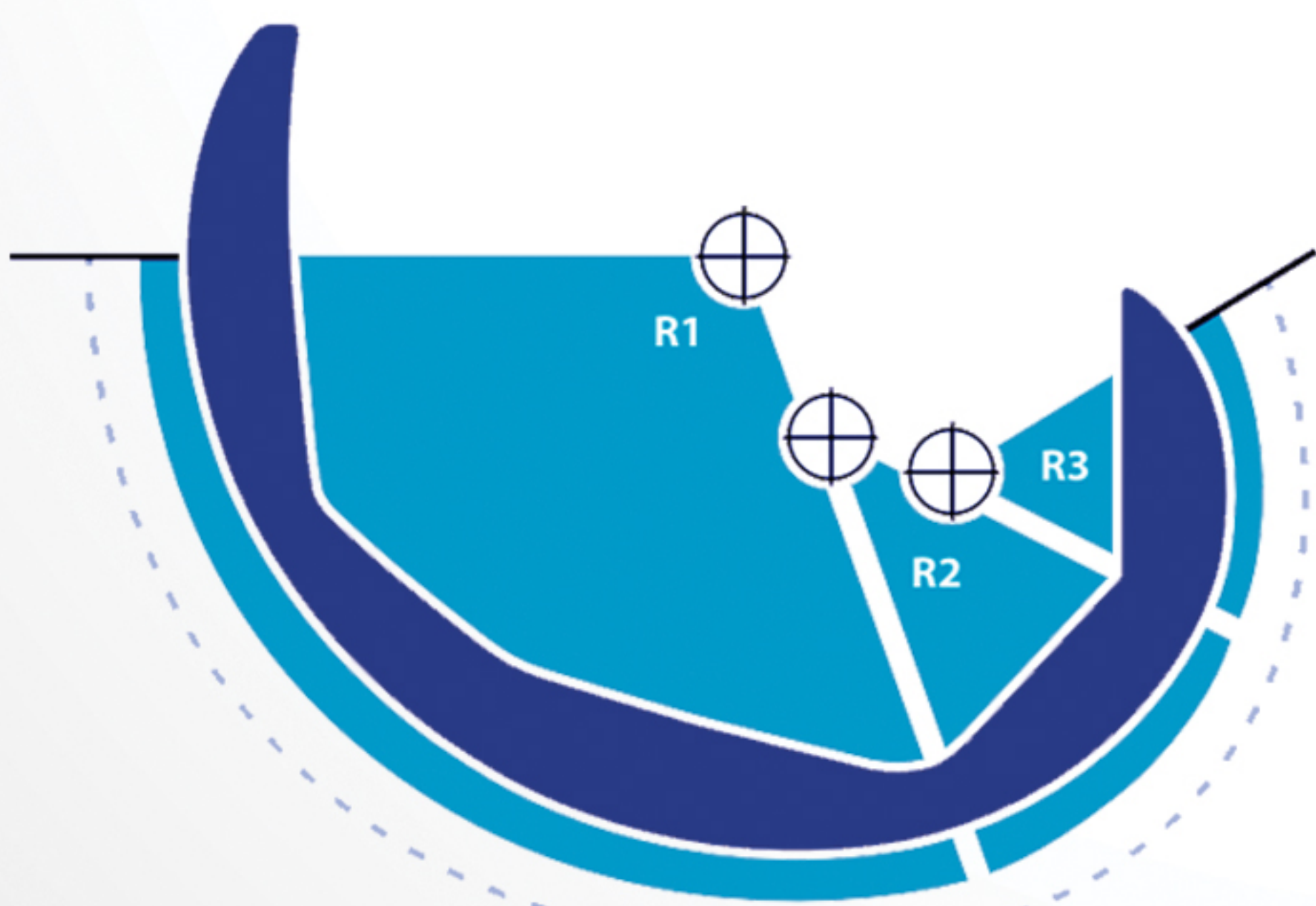
Stopping the slide, Increasing contact area.

Although designed to exhibit roll-back in flexion, traditional total knees instead exhibit a paradoxical slide forward. As well as making the patient feel unstable, this sliding may reduce flexion and increase tibiofemoral shear stresses.

Coupled with the constant radius of the femoral component, the raised anterior lip of the KneeTA Insert resists this paradoxical motion by providing complete medial A/P conformity throughout a range of motion. However, many contemporary femoral designs incorporate a decreasing radius of curvature throughout flexion, thus contact areas also decrease.

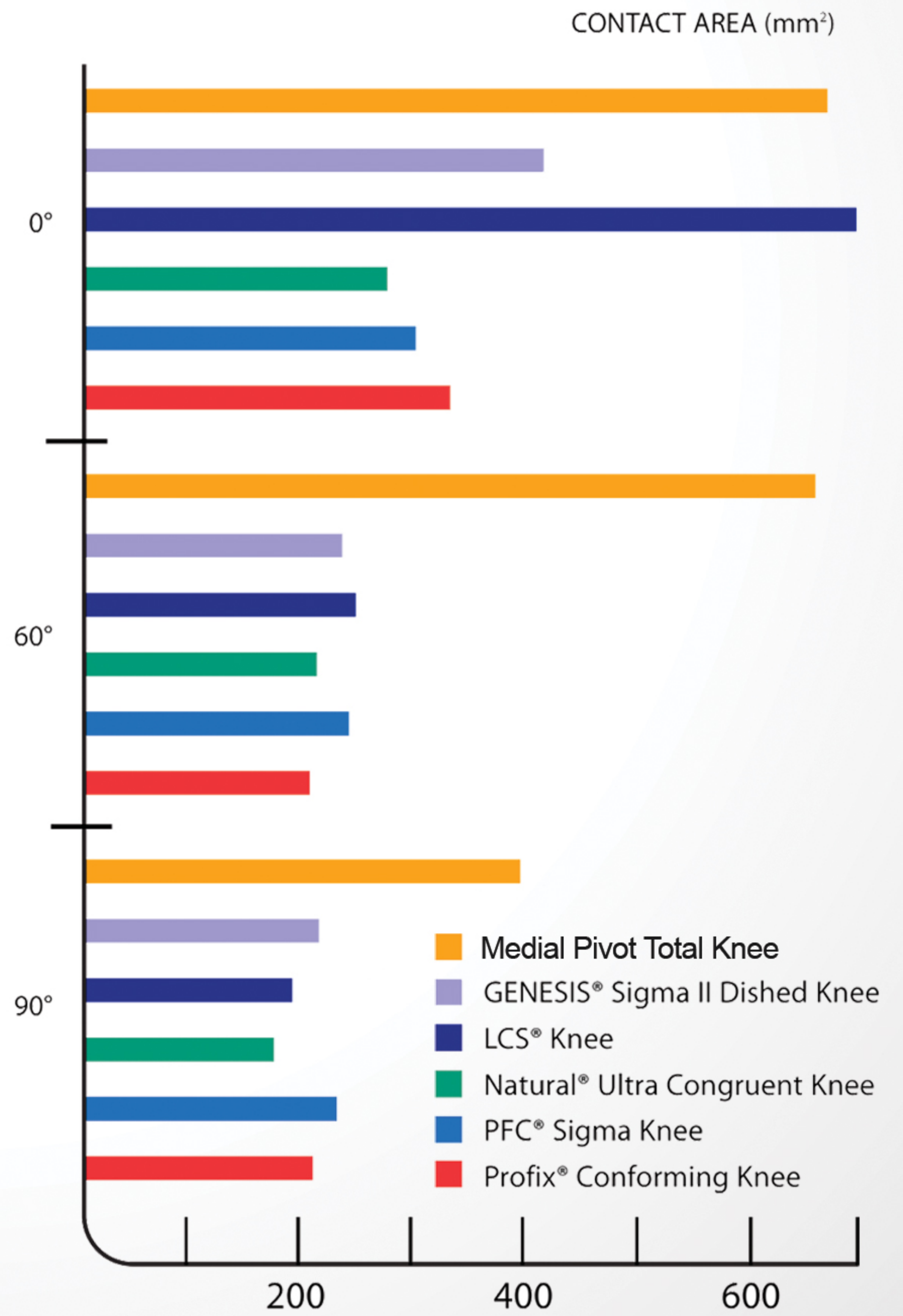


KneeTA Femoral Component features a constant radius from 0° - 90°



Traditional "J-curve" femoral curvatures have contact areas that decrease significantly past 20-30 degrees of flexion.

ENHANCED TIBIOFEMORAL CONTACT AREA



The constant radius of the KneeTA[®] Femoral Component maintains high contact area with the tibial insert deep into flexion, thereby **lowering long-term polyethylene wear rates**.

The "ball-in-socket" design provides consistent geometric features configured to prevent paradoxical motion.



Forging ahead daily ✓

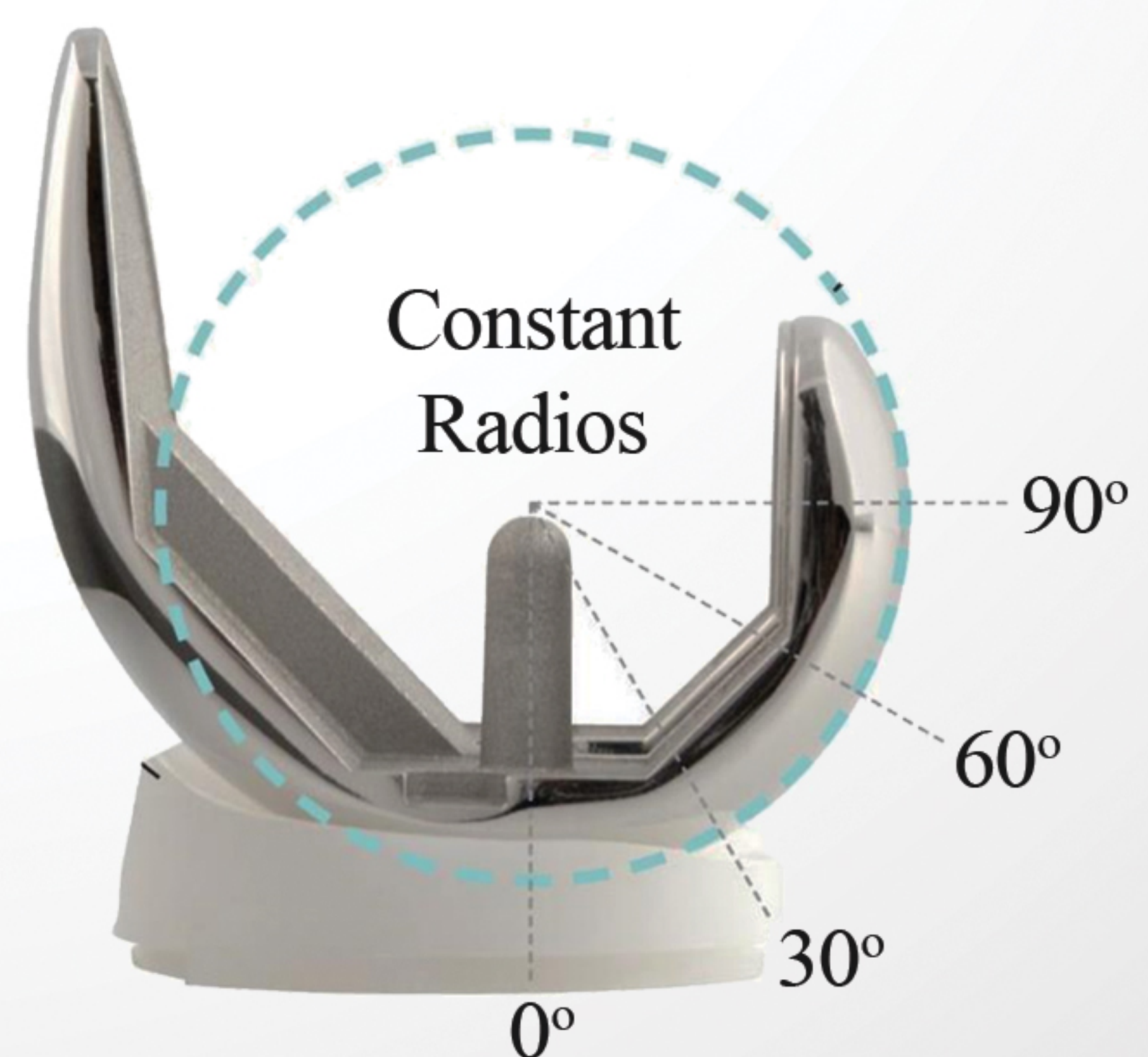
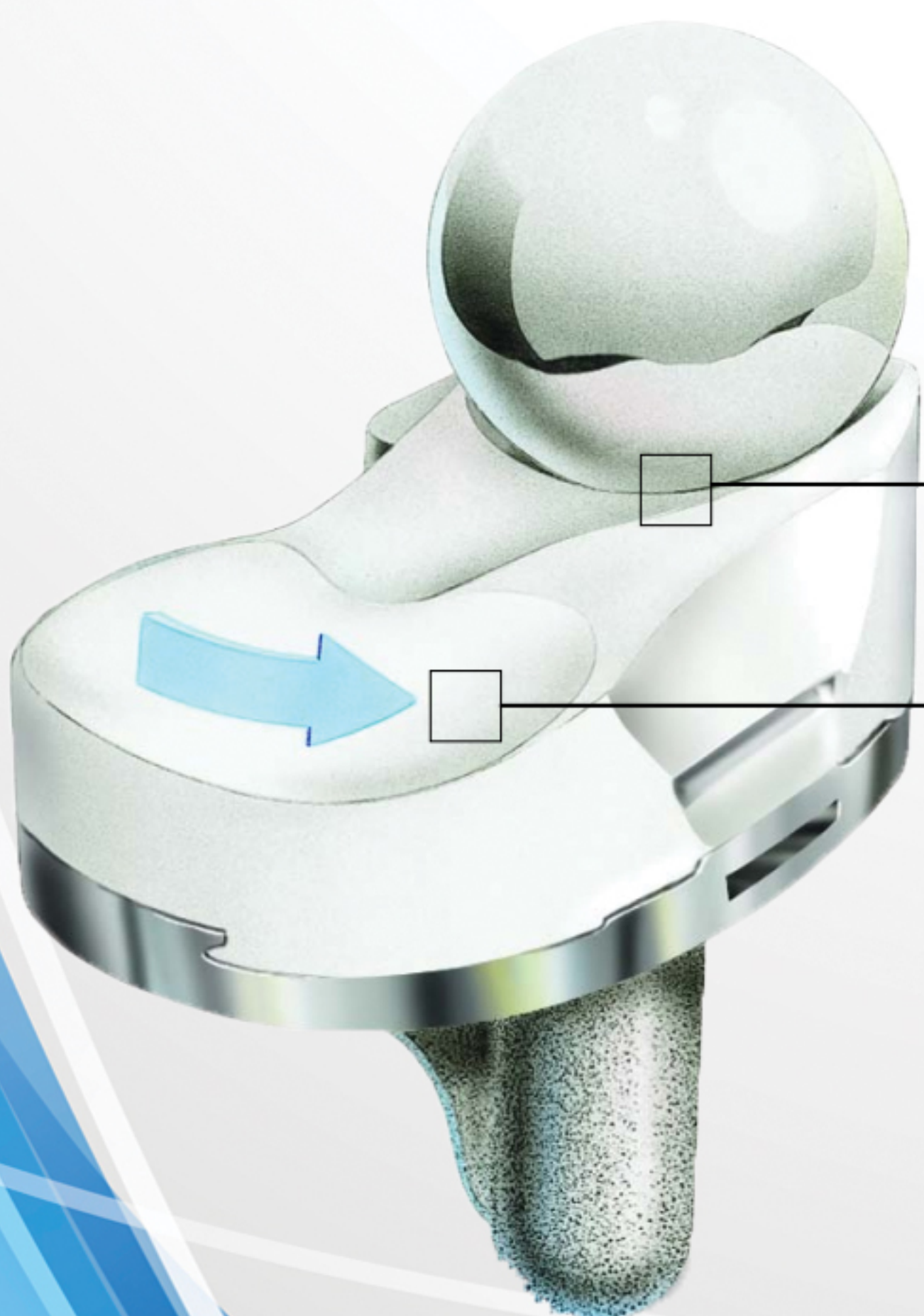
Medial-Pivot Mechanism :

The optimized design for better performance.

The KneeTa total knee system is based on knee kinematics studies that show the normal knee pivots on the medial condyle and that its posterior condyles are circular. The Medial Pivot feature utilizes a ball-in-socket articulating mechanism on its medial side. This provides maximum congruency and stability for the medial condyle and prevents paradoxical motion that is often associated with traditional designs. On the lateral side, the arcuate trough allows 15° of mixed rolling and spinning. The femoral component has consistent contact area throughout a range of motion. During development of the system, the following measurable goals were established:

- ✓ Restore normal knee kinematics and stability.
- ✓ Improve wear rates results through increase tibofemoral contact and predictable motion.
- ✓ Optimize range of motion (ROM).
- ✓ lower bone remove compare with other similar prosthesis.

The KneeTA medial-pivot insert restore normal medial pivot motion by creatating partial ball on socket with femoral component on medial side



On the lateral side, A/P translation is allowed in semi-congruent arcuate path around the medial articulation